

Interconnection Hardware Catalog AC23

AUGAT[®] Quality
and Innovation

*A complete line of Augat accessories,
from adaptors, programing devices,
and test jacks right on up to insertion
and extraction tools. All from
Augat—innovation that works.
Rev 4, 9/88*



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ADAPTORS

Machined

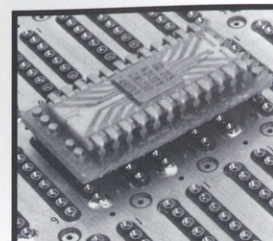
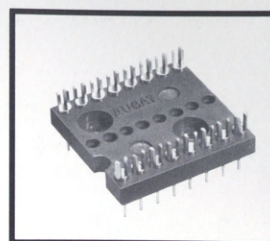
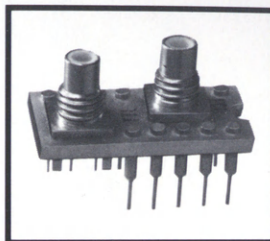
COAX

PLUG ADAPTOR
ASSEMBLIES

LSI ADAPTOR

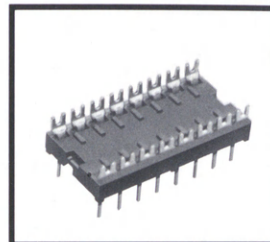
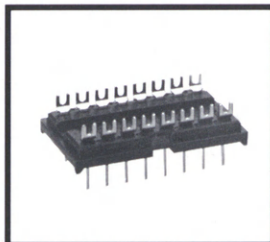
Stamped

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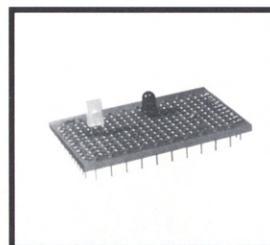
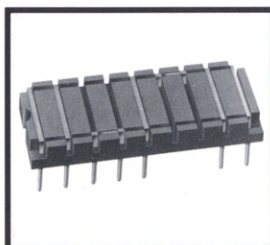
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PRINTED CIRCUIT

MICRO-MINIATURE PC



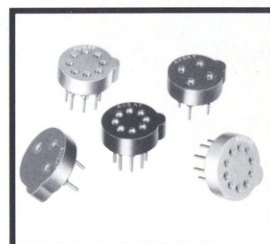
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TRANSISTOR SOCKETS

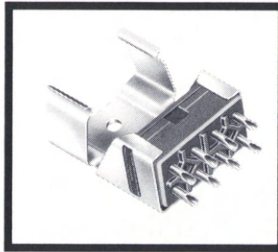
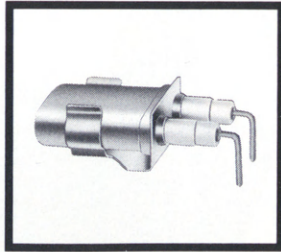
TO-3 POWER

IC SOCKETS - LOW PRO



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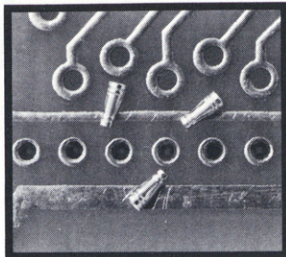
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CRYSTAL RELAY SOCKETS

RELAY SOCKET
ASSEMBLIES

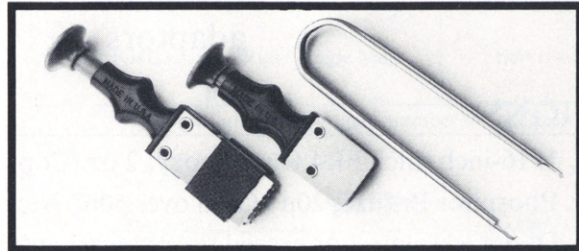
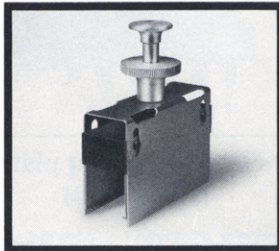
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HOLTITE®

ZERO-PROFILE
SOLDERLESS SOCKETS

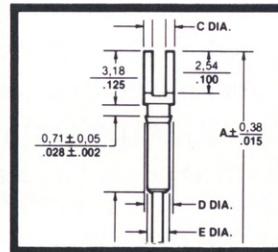
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ADDITIONAL COMPONENT PRODUCTS

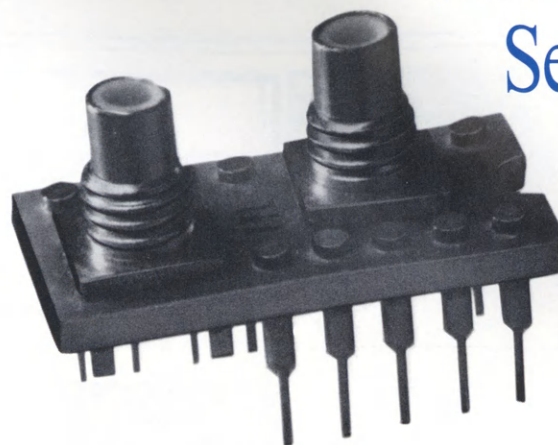
FOR IC SOCKETS AND OTHER COMPONENT PARTS, REQUEST AUGAT CATALOG SD-22

Coaxial Adaptors

101-HG
Series

Augat's 101-HG Series of coaxial adaptors offers an economical method of connecting 50 ohm RG-316/u miniature coaxial cable to solderless wrap-panels. These adaptors can be used to run clock and other high speed logic signals between solderless wrap panels.

- Available with solid or split ground planes
- Adapts subminiature 50 ohm coaxial cable RG-316/u to logic board
- Plugs into standard 16-pin DIP pattern
- SMB (snap-on) or SMC (screw-on) type jacks



101-HG1

- Connector body at circuit, grounds thru adaptor pins
- Subminiature cable connectors available that mate to screw on or snap on style adaptors

MATERIAL SPECIFICATIONS

BOARD	1/16-inch thick FR4 Glass epoxy; 2 oz. Copper circuitry; solder plated
PINS	Phosphor Bronze, 20μ" Gold over 50μ" Nickel
SMB/SMC CONNECTORS	Designed to meet or exceed the requirements of Mil-C-39012
SCREWS & NUTS	Brass per QQ-B-626
SPRING CONTACTS	Beryllium Copper per QQ-C-530
INSULATORS	Teflon per Mil-P-19468
LOCK WASHERS	Phosphor Bronze per QQ-B-750
CENTER CONTACTS	Gold plated .000100 inches thick per Mil-C-45204, over Copper per Mil-C-14550
OTHER METAL PARTS	Gold plated to meet the corrosion requirements of Mil-C-39012

PERFORMANCE CHARACTERISTICS

IMPEDANCE	50 Ohms nominal
VOLTAGE RATING	For 50 ohm connector on RG-316/u cable; 335 VRMS at sea level; 85 VRMS at 70,000 ft.
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	1000 VRMS at sea level
TEMPERATURE RATING	—65°C to +150°C
CORROSION	Mil. Std. 202, Method 101, Test Condition B
VIBRATION, HIGH FREQUENCY	Mil. Std. 202, Method 204, Test Condition B (SMB); Test Condition D (SMC)
SHOCK	Mil. Std. 202, Method 213, Test Condition B (SMB); Test Condition D (SMC)

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet.



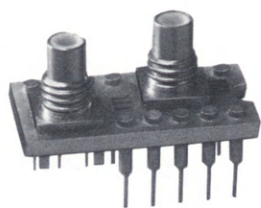
AUGAT INC., INTERCONNECTION PRODUCTS GROUP

33 Perry Ave., P.O. Box 779, Attleboro, MA 02703 (508)222-2202 FAX (508)222-0693

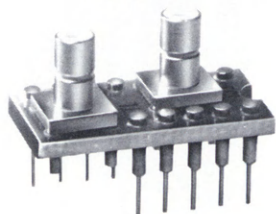
CUSTOMER SERVICE/INSIDE SALES

452 John Dietsch Blvd., P.O. Box 2510, Attleboro Falls, MA 02763 (508)699-9800 FAX (508)699-6717 TWX 710-391-0644

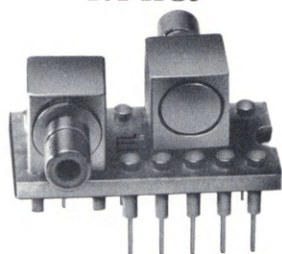
101-HG Series



**Vertical Screw-on
Style
101-HG1**


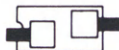






**Vertical Snap-on
Style
101-HG5**

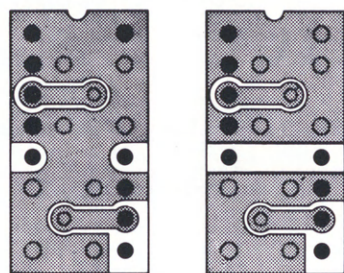


**Horizontal
101-HG3G1**

PART NUMBER DESIGNATIONS

PART NO.	SMB/SMC COAXIAL JACKS	CONNECTION STYLE	COAXIAL JACKS ORIENTATION	FIGURE
101-HG1	Straight Male	Screw-on	Vertical	2
101-HG5	Straight Male	Snap-on	Vertical	2
101-HG3G1	Right Angle Male	Snap-on		3
101-HG3G2	Right Angle Male	Snap-on		3
101-HG3G3	Right Angle Male	Snap-on		3
101-HG4G1	Right Angle Male	Screw-on		3
101-HG4G2	Right Angle Male	Screw-on		3
101-HG4G3	Right Angle Male	Screw-on		3

*Add suffix "-I" to part number to split ground plane configuration. See Fig. 1.

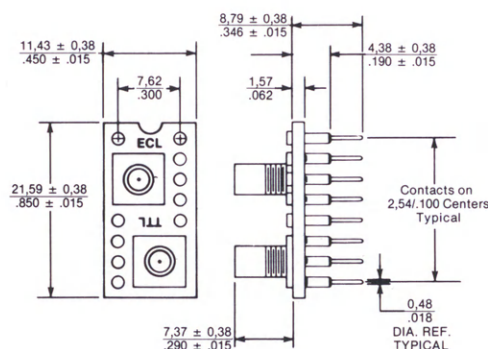


Solid Ground Plane

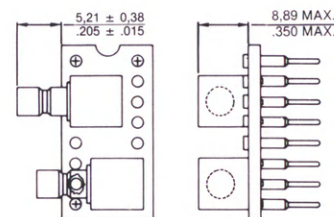
Split Ground Plane

Options •--Pins

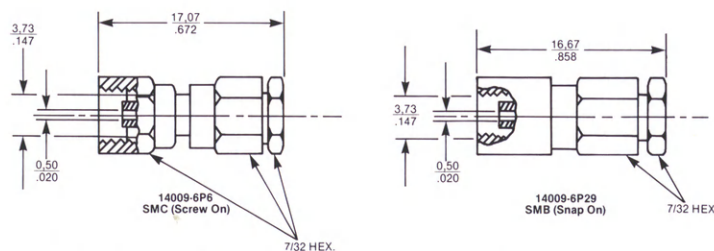
**Fig. 1
Circuit Outlines (Bottom View)**



**Fig. 2
Vertical Style**



**Fig. 3
Right Angle Style**



**Fig. 4
Subminiature cable connectors**

For Coaxial Cables:

RG-161 RG-187
RG-174 RG-188
RG-179 RG-316

TOLERANCES

Dimensions Specified in:

MILLIMETER
INCH

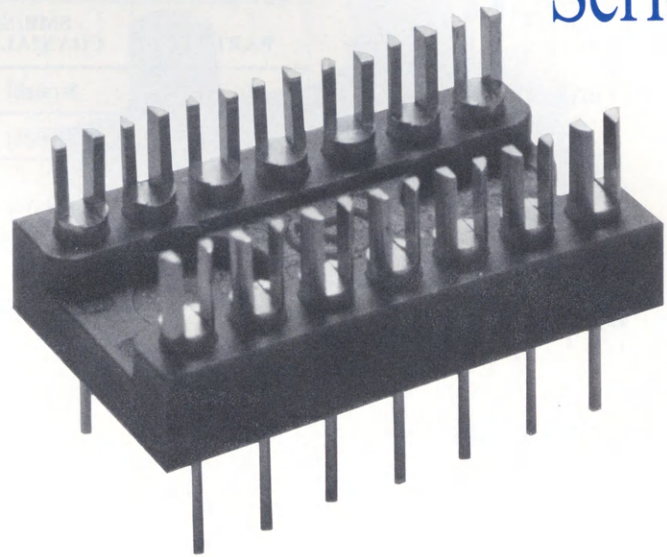
Tolerance: ± 0.13/005
unless otherwise specified

Plug Adaptor Assemblies

600
Series

MACHINED PIN ADAPTORS

The 600 Series is a high quality machined pin molded adaptor which is used to assemble hybrid and special network circuits. The .018" diameter precision pin allows the adaptor to be plugged into socket or wire-wrappable panels repeatedly.



- Precision machined pins
- Used for interposing discrete components. Terminals are on the same dimension as IC board patterns
- Option of round, solder pocket or slotted pin styles
- Terminations styles—printed circuit, or, wire-wrappable
- Thermoplastic polyester or nylon insulators
- Large variety of styles:
 - 8, 14, 16, 18, 20 pins—.300 between rows
 - 22 pins—.400 between rows
 - 14, 16, 24, 28, 36, 40 pins—.600 between rows
 - NEW!! Triple rows versions—21, 24, 27, 36, 42, 54 and 60 pins—.300 between rows

MATERIAL SPECIFICATIONS

INSULATORS	A) Thermoplastic polyester, UL rated 94V-0, per Mil-M-24519, type GPT-30F
PINS	Gold Plated Configurations: <ul style="list-style-type: none">A) AG, BG, CG style machined printed circuit and socket mounting terminals:<ul style="list-style-type: none">• Phos. Bronze composition B per Mil-B-750• 10 micro-inches AU minimum, per Mil-G-45204• 100 micro-inches Ni maximumB) AG wire-wrappable style terminals:<ul style="list-style-type: none">• Phos. Bronze composition B, per Mil-B-750• 10 micro-inches AU minimum per Mil-G-45204• 100 micro-inches Ni maximumC) BG wire-wrappable style terminals:<ul style="list-style-type: none">• Brass alloy 360, per QQ-B-626• 10 micro-inches AU minimum per Mil-G-45204• 100 micro-inches Ni maximumD) CG wire-wrappable style terminals:<ul style="list-style-type: none">• Brass alloy 360, per QQ-B-626• 10 micro-inches AU minimum per Mil-G-45204• 100 micro-inches Ni maximum
	Tin Plated Configurations: <ul style="list-style-type: none">A) AG, BG, CG printed circuit socket mounting and wire-wrappable terminals<ul style="list-style-type: none">• 400 micro-inches Tin maximum per Mil-T-10727• 100 micro-inches Copper maximum

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PERFORMANCE CHARACTERISTICS

MACHINED PIN ADAPTORS

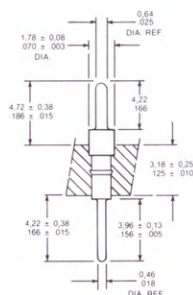
CURRENT RATING	5 Amp when tested with a 30-gage wire attached. Terminal will have a maximum 30°C temperature rise above ambient
CAPACITANCE	At a test frequency of 1 KHZ, adjacent and /or opposite terminal all at guard potential
	A) Adjacent terminal; AG and CG solder tail .36 pF
	BG (solder pocket) .42 pF
	Wire-wrappable .50 pF
	B) Opposite terminal; AG and CG solder tail .025 pF
	BG (solder pocket) .034 pF
	Wire-wrappable .037 pF
DIELECTRICAL WITHSTANDING VOLTAGE (DWV)	1000 VRMS at 30 inches mercury .500 VRMS when tested at 0.9 inches mercury, tested per Mil. Std. 202 Method 301
INSULATION RESISTANCE	1 x 10 ¹² ohms, tested to Mil. Std. 202, Method 302, tested at 500 volts
THERMAL SHOCK	No visual damage when tested in accordance with Mil. Std. 202, Method 107, Test condition F for 5 consecutive cycles of -56° C to +150° C
OPERATING TEMPERATURE	Polyester -65° C to +125° C, -85° F to +257° F
SALT SPRAY	No visual evidence of corrosion on Gold terminals when tested per Mil. Std. 202, Method 101, Test condition B for 48 hours and a 5% salt solution
VIBRATION	Tested to a frequency range of 10 to 2000 HZ and returned to 10 HZ in three perpendicular planes at a double amplitude of .06 in. or 20g's, whichever was less per Mil. Std. 202, Method 204
MECHANICAL SHOCK	Will meet the requirements of Mil. Std. 202, Method 213 when subjected to shock test at 150G acceleration
WIRE-WRAPPABLE TORQUE	2.5-inch ounces in both the clockwise and counterclockwise directions
AXIAL TERMINAL RETENTION	With a force of 7.5 lbs. applied to the tip of the terminal in an axial direction, there will be no evidence of movement
WIRE-WRAPPABLE TERMINAL BEND	The terminal will withstand a permanent set when flexed through an arc of plus or minus 30° from true position without breaking

PART NUMBER EXAMPLE:

600 SERIES COMPONENTS
 NUMBER OF PINS IN THE ASSEMBLY
 PIN STYLE
 A-Round Pin; B-Solder Pocket; C-Slotted Pin
 VARIATIONS
 GI-Polyester

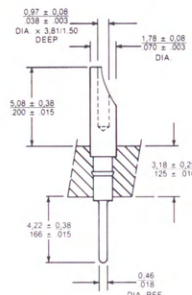
WIRE WRAPPABLE TERMINATION LEVEL:
 A) No Code - 3 Level; B) -2 - 2 Level
 TERMINATION STYLE:
 A) No Code - .018 Dia. Pin; B) F -.025 sq. wire-wrappable
 PLATING
 A) No Code - Gold Plating; B) T - Tin Plating

SOLDER TAIL STYLE TERMINALS



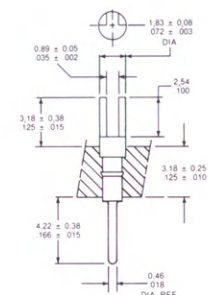
8128-41P6 (Gold)
8128-41P5 (Tin)

FIG. A



8128-40P10 (Gold)
8128-40P9 (Tin)

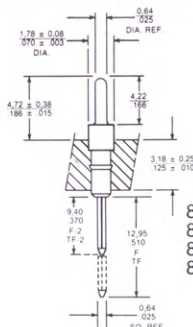
FIG. B



8128-39P6 (Gold)
8128-39P5 (Tin)

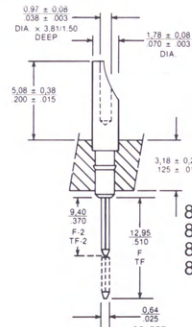
FIG. C

WIRE-WRAP STYLE TERMINALS



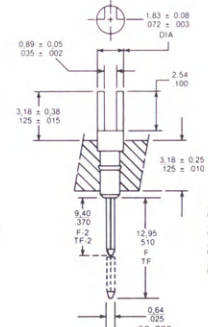
8128-80P3 (Gold-3 Level)
8128-80P4 (Tin-3 Level)
8128-79P3 (Gold-2 Level)
8128-79P4 (Tin-2 Level)

FIG. D



8128-20P3 (Gold-3 Level)
8128-20P4 (Tin-3 Level)
8128-20P10 (Gold-2 Level)
8128-20P11 (Tin-2 Level)

FIG. E



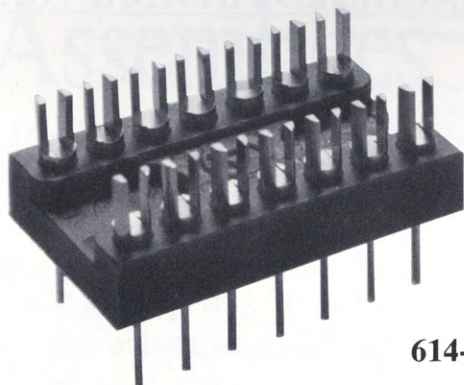
8128-95P4 (Gold-3 Level)
8128-95P5 (Tin-3 Level)
8128-95P7 (Gold-2 Level)
8128-95P8 (Tin-2 Level)

FIG. F

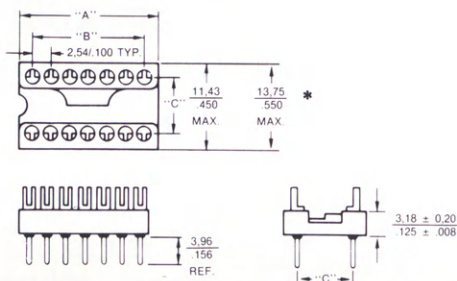
CODE
 F
 TF
 F-2
 TF-2

600 Series

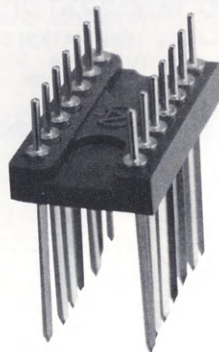
MACHINED PIN ADAPTORS



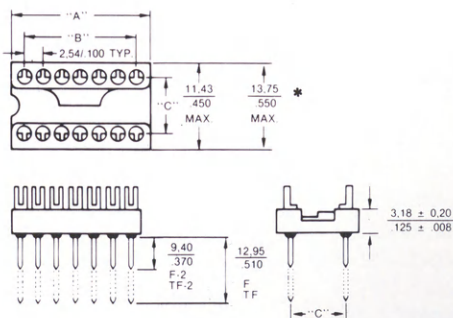
614-CG1



Dimensions for PC Style Termination (Fig. 1)



614-AG1F



Dimensions for Wire-Wrappable Style Termination (Fig. 2)

PRINTED CIRCUIT STYLES

.300 AND .400 BETWEEN ROWS (FIG. 1)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ± .005
8	Round	608-AG1	608-AG1T	(10,16) .400	(7,62) .300	(7,62) .300
	Solder Pocket	608-BG1	608-BG1T			
	Slotted	608-CG1	608-CG1T			
14	Round	614-AG1	614-AG1T	(17,78) .700	(15,24) .600	(7,62) .300
	Solder Pocket	614-BG1	614-BG1T			
	Slotted	614-CG1	614-CG1T			
16	Round	616-AG1	616-AG1T	(20,32) .800	(17,78) .700	(7,62) .300
	Solder Pocket	616-BG1	616-BG1T			
	Slotted	616-CG1	616-CG1T			
18	Round	618-AG1	618-AG1T	(22,86) .900	(20,32) .800	(7,62) .300
	Solder Pocket	618-BG1	618-BG1T			
	Slotted	618-CG1	618-CG1T			
20	Round	620-AG1	620-AG1T	(25,90) 1.000	(22,86) .900	(7,62) .300
	Solder Pocket	620-BG1	620-BG1T			
	Slotted	620-CG1	620-CG1T			
*22	Round	622-AG1	622-AG1T	(29,21) 1.150	(25,90) 1.000	(10,16) .400
	Solder Pocket	622-BG1	622-BG1T			
	Slotted	622-CG1	622-CG1T			

WIRE-WRAPPABLE STYLES

.300 AND .400 BETWEEN ROWS (FIG. 2)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ± .005
8	Round	608-AG1F	608-AG1TF	(10,16) .400	(7,62) .300	(7,62) .300
	Solder Pocket	608-BG1F	608-BG1TF			
	Slotted	608-CG1F	608-CG1TF			
14	Round	614-AG1F	614-AG1TF	(17,78) .700	(15,24) .600	(7,62) .300
	Solder Pocket	614-BG1F	614-BG1TF			
	Slotted	614-CG1F	614-CG1TF			
16	Round	616-AG1F	616-AG1TF	(20,32) .800	(17,78) .700	(7,62) .300
	Solder Pocket	616-BG1F	616-BG1TF			
	Slotted	616-CG1F	616-CG1TF			
18	Round	618-AG1F	618-AG1TF	(22,86) .900	(20,32) .800	(7,62) .300
	Solder Pocket	618-BG1F	618-BG1TF			
	Slotted	618-CG1F	618-CG1TF			
20	Round	620-AG1F	620-AG1TF	(25,90) 1.000	(22,86) .900	(7,62) .300
	Solder Pocket	620-BG1F	620-BG1TF			
	Slotted	620-CG1F	620-CG1TF			
*22	Round	622-AG1F	622-AG1TF	(29,21) 1.150	(25,90) 1.000	(10,16) .400
	Solder Pocket	622-BG1F	622-BG1TF			
	Slotted	622-CG1F	622-CG1TF			

NOTE: FOR 2-LEVEL TERMINATION, ADD SUFFIX (-2) TO BASIC PART NUMBER
EXAMPLE: 608-AG1TF-2

600 Series

MACHINED PIN ADAPTORS

PRINTED CIRCUIT STYLES

.800 SPACING BETWEEN ROWS (FIG. 3)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ±.005
14	Round	614-AG2	614-AG2T	(19,05) .750	(15,24) .600	(20,32) .800
	Solder Pocket	614-BG2	614-BG2T			
	Slotted	614-CG2	614-CG2T			
16	Round	616-AG2	616-AG2T	(21,59) .850	(17,78) .700	(20,32) .800
	Solder Pocket	616-BG2	616-BG2T			
	Slotted	616-CG2	616-CG2T			

WIRE-WRAPPABLE STYLES

.800 SPACING BETWEEN ROWS (FIG. 4)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ±.005
14	Round	614-AG2F	614-AG2TF	(19,05) .750	(15,24) .600	(20,32) .800
	Solder Pocket	614-BG2F	614-BG2TF			
	Slotted	614-CG2F	614-CG2TF			
16	Round	616-AG2F	616-AG2TF	(21,59) .850	(17,78) .700	(20,32) .800
	Solder Pocket	616-BG2F	616-BG2TF			
	Slotted	616-CG2F	616-CG2TF			

PRINTED CIRCUIT STYLES

DOUBLE PATTERN

.300 SPACING BETWEEN ROWS (FIG. 5)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ±.005
28	Round	628-AG1	628-AG1T	(19,05) .750	(15,24) .600	(7,62) .300
	Solder Pocket	628-BG1	628-BG1T			
	Slotted	628-CG1	628-CG1T			
32	Round	632-AG1	632-AG1T	(21,59) .850	(17,78) .700	(7,62) .300
	Solder Pocket	632-BG1	632-BG1T			
	Slotted	632-CG1	632-CG1T			

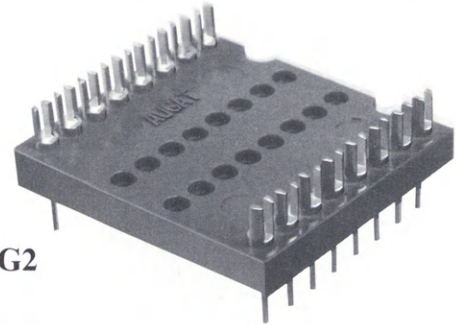
WIRE-WRAPPABLE STYLES

DOUBLE PATTERN

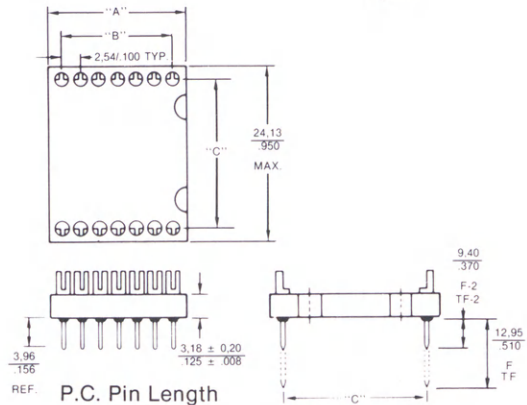
.300 SPACING BETWEEN ROWS (FIG. 6)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ±.005
28	Round	628-AG1F	628-AG1TF	(19,05) .750	(15,24) .600	(7,62) .300
	Solder Pocket	628-BG1F	628-BG1TF			
	Slotted	628-CG1F	628-CG1TF			
32	Round	632-AG1F	632-AG1TF	(21,59) .850	(17,78) .700	(7,62) .300
	Solder Pocket	632-BG1F	632-BG1TF			
	Slotted	632-CG1F	632-CG1TF			

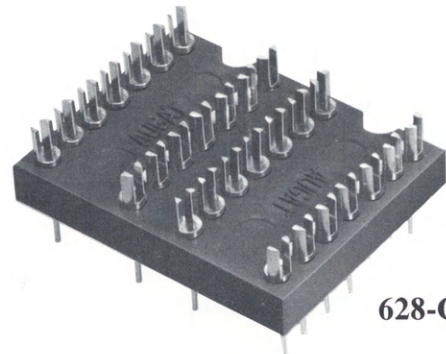
NOTE: FOR 2-LEVEL TERMINATION, ADD SUFFIX (-2) TO BASIC PART NUMBER



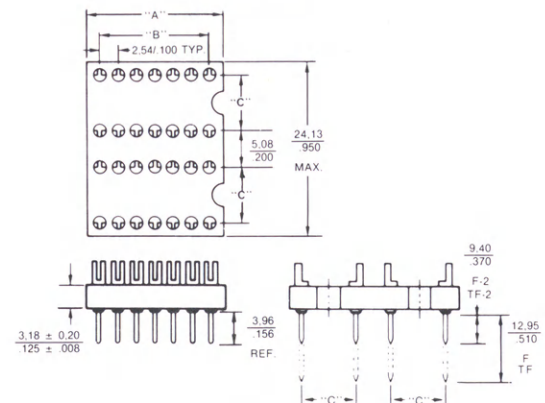
616-CG2



Dimensions (Figs. 3 & 4)



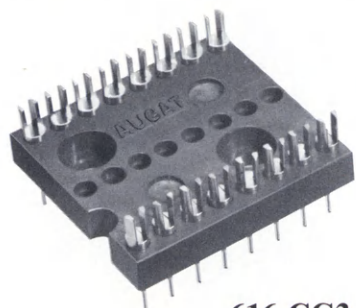
628-CG1



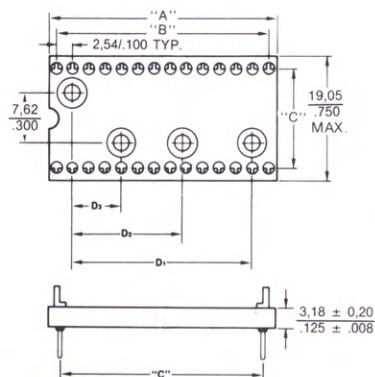
Dimensions (Figs. 5 & 6)

600 Series

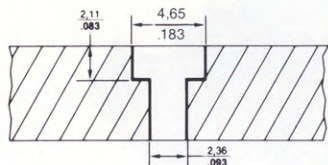
MACHINED PIN ADAPTORS



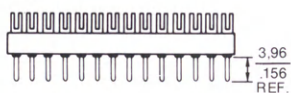
616-CG3



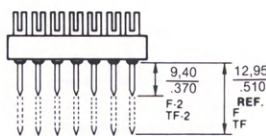
Universal Style Dimensions
(Figs. 7 & 8)



Through Hole Dimensions



P.C. Pin Lengths
(Fig. 7)



Wire-Wrappable Pin Lengths
(Fig. 8)

PRINTED CIRCUIT STYLES

UNIVERSAL STYLE .600 BETWEEN ROWS (FIG. 7)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ± .010	D ¹ ± .005	D ² ± .005	D ³ ± .005
14	Round	614-AG3	614-AG3T	(17,78) .700	(15,24) .600	(15,24) .600	(10,16) .400	—	—
	Solder Pocket	614-BG3	614-BG3T						
	Slotted	614-CG3	614-CG3T						
16	Round	616-AG3	616-AG3T	(20,32) .800	(17,78) .700	(15,24) .600	(10,16) .400	—	—
	Solder Pocket	616-BG3	616-BG3T						
	Slotted	616-CG3	616-CG3T						
24	Round	624-AG1	624-AG1T	(30,98) 1.200	(27,94) 1.100	(15,24) .600	(22,86) .900	(10,16) .400	—
	Solder Pocket	624-BG1	624-BG1T						
	Slotted	624-CG1	624-CG1T						
28	Round	628-AG2	628-AG2T	(35,56) 1.400	(33,02) 1.300	(15,24) .600	(22,86) .900	(10,16) .400	—
	Solder Pocket	628-BG2	628-BG2T						
	Slotted	628-CG2	628-CG2T						
32	Round	632-AG2	632-AG2T	(40,64) 1.600	(38,10) 1.500	(15,24) .600	(22,86) .900	(10,16) .400	—
	Solder Pocket	632-BG2	632-BG2T						
	Slotted	632-CG2	632-CG2T						
36	Round	636-AG1	636-AG1T	(45,72) 1.800	(43,18) 1.700	(15,24) .600	(38,10) 1.500	(22,86) .900	(10,16) .400
	Solder Pocket	636-BG1	636-BG1T						
	Slotted	636-CG1	636-CG1T						
40	Round	640-AG1	640-AG1T	(50,80) 2.000	(48,26) 1.900	(15,24) .600	(38,10) 1.500	(22,86) .900	(10,16) .400
	Solder Pocket	640-BG1	640-BG1T						
	Slotted	640-CG1	640-CG1T						

WIRE-WRAPPABLE STYLES

UNIVERSAL STYLE .600 BETWEEN ROWS (FIG. 7)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ± .010	D ¹ ± .005	D ² ± .005	D ³ ± .005
14	Round	614-AG3F	614-AG3TF	(17,78) .700	(15,24) .600	(15,24) .600	(10,16) .400	—	—
	Solder Pocket	614-BG3F	614-BG3TF						
	Slotted	614-CG3F	614-CG3TF						
16	Round	616-AG3F	616-AG3TF	(20,32) .800	(17,78) .700	(15,24) .600	(10,16) .400	—	—
	Solder Pocket	616-BG3F	616-BG3TF						
	Slotted	616-CG3F	616-CG3TF						
24	Round	624-AG1F	624-AG1TF	(30,98) 1.200	(27,94) 1.100	(15,24) .600	(22,86) .900	(10,16) .400	—
	Solder Pocket	624-BG1F	624-BG1TF						
	Slotted	624-CG1F	624-CG1TF						
28	Round	628-AG2F	628-AG2TF	(35,56) 1.400	(33,02) 1.300	(15,24) .600	(22,86) .900	(10,16) .400	—
	Solder Pocket	628-BG2F	628-BG2TF						
	Slotted	628-CG2F	628-CG2TF						
32	Round	632-AG2F	632-AG2TF	(40,64) 1.600	(38,10) 1.500	(15,24) .600	(22,86) .900	(10,16) .400	—
	Solder Pocket	632-BG2F	632-BG2TF						
	Slotted	632-CG2F	632-CG2TF						
36	Round	636-AG1F	636-AG1TF	(45,72) 1.800	(43,18) 1.700	(15,24) .600	(38,10) 1.500	(22,86) .900	(10,16) .400
	Solder Pocket	636-BG1F	636-BG1TF						
	Slotted	636-CG1F	636-CG1TF						
40	Round	640-AG1F	640-AG1TF	(50,80) 2.000	(48,26) 1.900	(15,24) .600	(38,10) 1.500	(22,86) .900	(10,16) .400
	Solder Pocket	640-BG1F	640-BG1TF						
	Slotted	640-CG1F	640-CG1TF						

NOTE: FOR 2-LEVEL TERMINATION, ADD SUFFIX (-2) TO BASIC PART NUMBER
EXAMPLE: 614-AG3F-2

600 Series

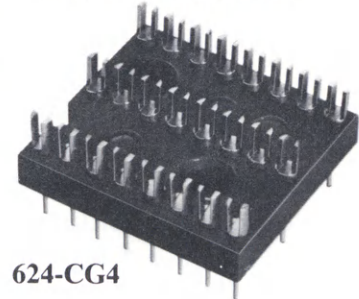
MACHINED PIN ADAPTORS

PRINTED CIRCUIT STYLES

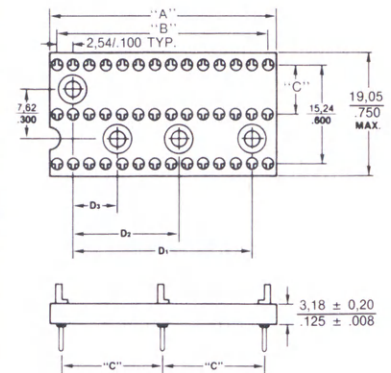
TRIPLE PATTERNS—.300 BETWEEN ROWS (FIG. 9)

NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ± .005	D ¹ ± .005	D ² ± .005	D ³ ± .005
21	Round	621-AG4	621-AG4T						
	Solder Pocket	621-BG4	621-BG4T	(17,73) .700	(15,24) .600	(7,62) .300	(10,16) .400	—	—
	Slotted	621-CG4	621-CG4T						
24	Round	624-AG4	624-AG4T						
	Solder Pocket	624-BG4	624-BG4T	(20,27) .800	(17,78) .700	(7,62) .300	(10,16) .400	—	—
	Slotted	624-CG4	624-CG4T						
27	Round	627-AG4	627-AG4T						
	Solder Pocket	627-BG4	627-BG4T	(22,81) .900	(20,32) .800	(7,62) .300	(10,16) .400	—	—
	Slotted	627-CG4	627-CG4T						
36	Round	636-AG4	636-AG4T						
	Solder Pocket	636-BG4	636-BG4T	(30,43) 1.200	(27,94) 1.100	(7,62) .300	(22,86) .900	(10,16) .400	—
	Slotted	636-CG4	636-CG4T						
42	Round	642-AG4	642-AG4T						
	Solder Pocket	642-BG4	642-BG4T	(35,51) 1.400	(33,02) 1.300	(7,62) .300	(22,86) .900	(10,16) .400	—
	Slotted	642-CG4	642-CG4T						
54	Round	654-AG4	654-AG4T						
	Solder Pocket	654-BG4	654-BG4T	(45,67) 1.800	(43,18) 1.700	(7,62) .300	(38,10) 1.500	(22,86) .900	(10,16) .400
	Slotted	654-CG4	654-CG4T						
60	Round	660-AG4	660-AG4T						
	Solder Pocket	660-BG4	660-BG4T	(50,75) 2.000	(48,26) 1.900	(7,62) .300	(38,10) 1.500	(22,86) .900	(10,16) .400
	Slotted	660-CG4	660-CG4T						

TRIPLE PATTERNS .300 Between rows



624-CG4

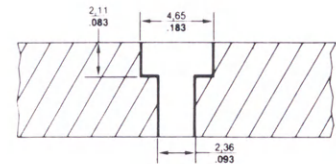


Triple Pattern Dimensions
(Figs. 9 & 10)

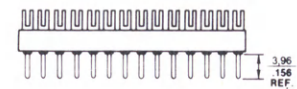
WIRE-WRAPPABLE STYLES

TRIPLE PATTERNS—.300 BETWEEN ROWS (FIG. 10)

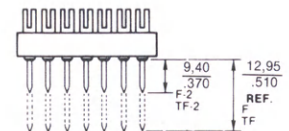
NO. OF PINS	PIN STYLE	POLYESTER P/N GOLD	POLYESTER P/N TIN	A MAX.	B TYP.	C ± .005	D ¹ ± .005	D ² ± .005	D ³ ± .005
21	Round	621-AG4F	621-AG4TF						
	Solder Pocket	621-BG4F	621-BG4TF	(17,73) .700	(15,24) .600	(7,62) .300	(10,16) .400	—	—
	Slotted	621-CG4F	621-CG4TF						
24	Round	624-AG4F	624-AG4TF						
	Solder Pocket	624-BG4F	624-BG4TF	(20,27) .800	(17,78) .700	(7,62) .300	(10,16) .400	—	—
	Slotted	624-CG4F	624-CG4TF						
27	Round	627-AG4F	627-AG4TF						
	Solder Pocket	627-BG4F	627-BG4TF	(22,81) .900	(20,32) .800	(7,62) .300	(10,16) .400	—	—
	Slotted	627-CG4F	627-CG4TF						
36	Round	636-AG4F	636-AG4TF						
	Solder Pocket	636-BG4F	636-BG4TF	(30,43) 1.200	(27,94) 1.100	(7,62) .300	(22,86) .900	(10,16) .400	—
	Slotted	636-CG4F	636-CG4TF						
42	Round	642-AG4F	642-AG4TF						
	Solder Pocket	642-BG4F	642-BG4TF	(35,51) 1.400	(33,02) 1.300	(7,62) .300	(22,86) .900	(10,16) .400	—
	Slotted	642-CG4F	642-CG4TF						
54	Round	654-AG4F	654-AG4TF						
	Solder Pocket	654-BG4F	654-BG4TF	(45,67) 1.800	(43,18) 1.700	(7,62) .300	(38,10) 1.500	(22,86) .900	(10,16) .400
	Slotted	654-CG4F	654-CG4TF						
60	Round	660-AG4F	660-AG4TF						
	Solder Pocket	660-BG4F	660-BG4TF	(50,75) 2.000	(48,26) 1.900	(7,62) .300	(38,10) 1.500	(22,86) .900	(10,16) .400
	Slotted	660-CG4F	660-CG4TF						



Through Hole Dimensions



P.C. Pin Lengths
(Fig. 9)



Wire-Wrappable
Pin Lengths
(Fig. 10)

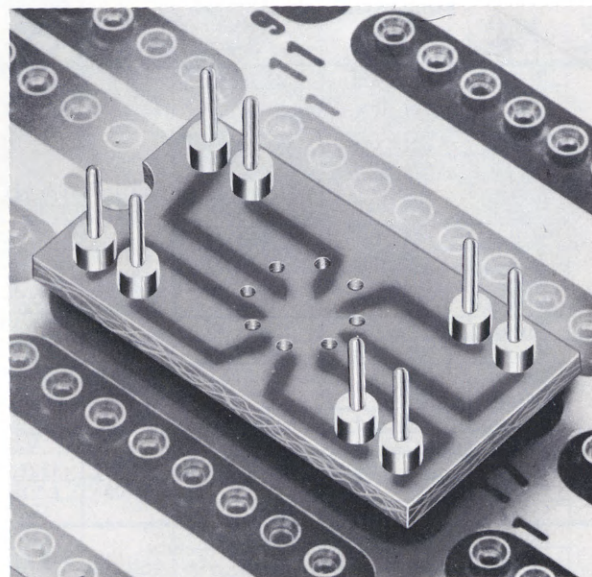
Transistor Adaptor Plugs

600-AG
Series

MACHINED PIN ADAPTORS

The 600-AG family of FR4 glass epoxy, machined pin adaptors. Converts standard 6 thru 12 lead round style transistor packages, to standard 14 and 16 pin IC format. These adaptors are used to mount circuits directly to wire-wrappable panels that have 14 or 16 pin sockets, plug directly into DIP sockets or solder directly to printed wiring panels.

- TO -5 adaptors with .300" centers between rows of pins, mount directly to any 14- or 16-pin packaging panel
- Feed thru pins/style, for convenient use as test points
- .018" dia. pins, for multiple insertion into socket contacts
- .026" dia. mounting holes enable mounting transistor directly or for mounting a transistor socket for greater flexibility
- Adaptors with .600" centers designed for use on universal packaging panels
- Traces plated with Electro Tin for easy soldering



PART NUMBER DESIGNATIONS

PART NUMBER	FIG.	PIN COUNT	PIN CIRCLE	A ± .010	B ± .010	C ± .005	D Ref.	E ± .005	F ± .015	G ± .005	H ± .015
606-AG10	1	6 <small>No Pin, Position 9 & 12</small>	$\frac{5,08}{.200}$	$\frac{11,68}{.460}$	$\frac{21,84}{.860}$	$\frac{7,62}{.300}$	$\frac{17,78}{.700}$	$\frac{4,22}{.166}$	$\frac{5,54}{.218}$	$\frac{3,96}{.156}$	$\frac{6,58}{.259}$
608-AG18	4	8	$\frac{5,08}{.200}$	$\frac{19,30}{.760}$	$\frac{11,68}{.460}$	$\frac{15,24}{.600}$	$\frac{7,62}{.300}$				
608-AG19	4	8	$\frac{5,84}{.230}$	$\frac{19,30}{.760}$	$\frac{11,68}{.460}$	$\frac{15,24}{.600}$	$\frac{7,62}{.300}$				
608-AG21	1	8	$\frac{5,08}{.200}$	$\frac{11,68}{.460}$	$\frac{21,84}{.860}$	$\frac{7,62}{.300}$	$\frac{17,78}{.700}$				
608-AG22	1	8	$\frac{5,84}{.230}$	$\frac{11,68}{.460}$	$\frac{21,84}{.860}$	$\frac{7,62}{.300}$	$\frac{17,78}{.700}$				
610-AG19	5	10	$\frac{5,84}{.230}$	$\frac{19,30}{.760}$	$\frac{14,20}{.560}$	$\frac{15,24}{.600}$	$\frac{10,16}{.400}$				
610-AG22	2	10	$\frac{5,84}{.230}$	$\frac{11,68}{.460}$	$\frac{21,84}{.860}$	$\frac{7,62}{.300}$	$\frac{17,78}{.700}$				
612-AG20	6	12	$\frac{7,11}{.280}$	$\frac{19,30}{.760}$	$\frac{16,76}{.660}$	$\frac{15,24}{.600}$	$\frac{12,70}{.500}$				
612-AG23	3	12	$\frac{7,11}{.280}$	$\frac{11,68}{.460}$	$\frac{24,38}{.960}$	$\frac{7,62}{.300}$	$\frac{20,32}{.800}$				

DIMENSIONS SPECIFIED IN:
 Millimeter
 Inch

Tolerance: ± 0,13/.005



AUGAT INC., INTERCONNECTION PRODUCTS GROUP

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CUSTOMER SERVICE/INSIDE SALES

452 John Dietsch Blvd., P.O. Box 2510, Attleboro Falls, MA 02763 (508)699-9800 FAX (508)699-6717 TWX 710-391-0644

MATERIAL SPECIFICATIONS

MACHINED PIN ADAPTORS

INSULATOR .....	.062 " thick FR4 glass epoxy, 2 oz. Copper circuitry, FL- GFN062C2/0 AIIB per Mil-P-13949, rated 94V-2 or better
PLATING	200 Micro-inches Electro Tin
PIN	Phosphor Bronze, per QQ-B-750
PLATING	Gold, 10 Micro-inches on 608 Series, 20 Micro-inches all others

PERFORMANCE CHARACTERISTICS

CAPACITANCE	4 Pico Farads
BULK RESISTANCE	10 Milliohms max.
CURRENT RATING	5 Amps DC per pin
OPERATING VOLTAGE	500 Volts, not to exceed limit of interconnected device
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	1000 Volts at sea level, 300 volts at 50k feet
INSULATION RESISTANCE	2×10^7 ohms
OPERATING TEMPERATURE RANGE	-50 °C to + 125 °C
SOLDERABILITY	Per Mil. Std. 202, Method 208

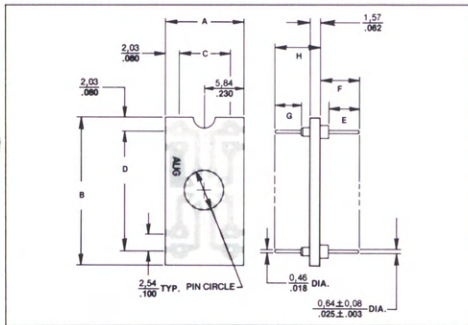


FIG. 1
606-AG10
608-AG21
608-AG22

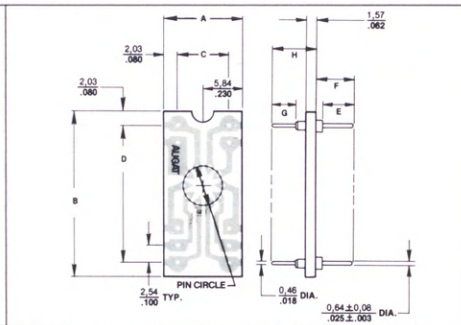


FIG. 2
610-AG22

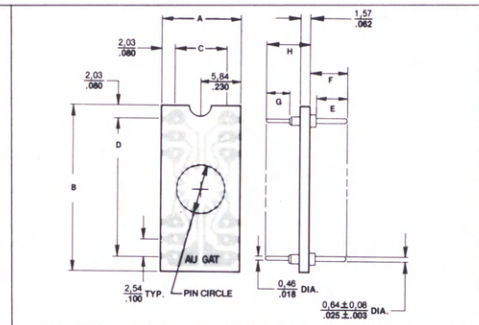


FIG. 3
612-AG23

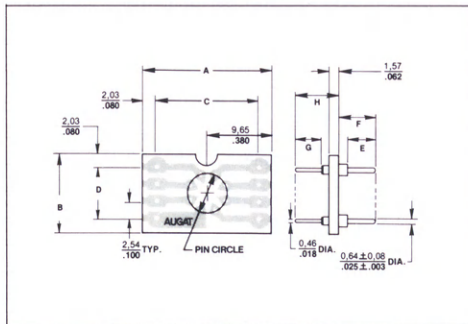


FIG. 4
608-AG18
608-AG19

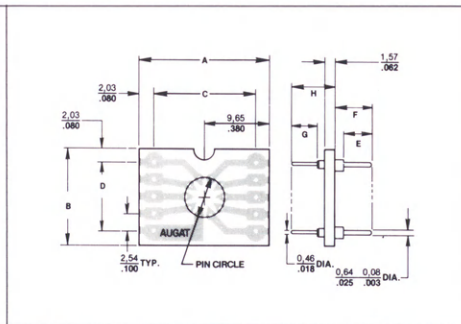


FIG. 5
610-AG19

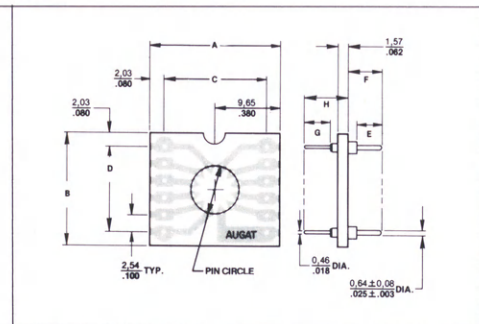


FIG. 6
612-AG20

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet. Current drawings and specs are available on request.



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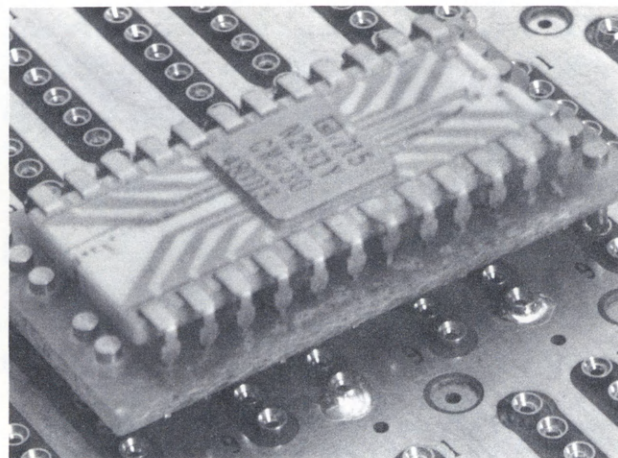
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LSI Adaptor Plugs

600-HG Series

The 600-HG series of LSI DIP adaptors give the package design engineer the convenience of plugging standard IC's into different configurations of packaging panels. Available for wire wrapping formats of .300" x .100" x .300", .300" x .200" x .300" and in universal .300" x .300" x .300" row centers, both in horizontal and vertical layouts. Thus making it possible to use the most effective use of the packing panels format and the designer's electrical circuit requirements.



624-HG16

- Adaptor plugs are designed to interpose LSI packages to Augat patterned and universal style boards
- Adaptor pins are located to prevent improper positioning within the patterned area
- Designed for 20 thru 40 lead LSI devices on .300", .400" and .600" spacing
- LSI package is soldered into the adaptor, which is then plugged into the socket patterns

PART NUMBER DESIGNATIONS

PART 1 NUMBER	FIG.	ACCEPTS COMPONENT SIZE	THRU HOLE	PIN CONFIGURATION					APPLICATION	FORMAT										
				STYLE DIM. REF.	LENGTH REF.	MATERIAL	PLATING	PLATING THICKNESS												
620-HG16	1	UP TO 20 LEADS $\frac{7,62 \times 2,54}{.300 \times .100}$	.041	ROUND .018	.155	PHOS BRONZE	GOLD	20 MICRO- INCHES	Adapt LSI to 14 and 16 pin IC pattern on .300 × .200 × .300 row centers	HORIZ									
622-HG16	2	UP TO 22 LEADS $\frac{10,16 \times 2,54}{.400 \times .100}$	.035		.155				.155	Adapts LSI to Univer- sal board format .300 row centers	HORIZ								
622-HG17	3	UP TO 24 LEADS $\frac{10,16 \times 2,54}{.400 \times .100}$								.155	.155	Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	VERT
624-HG17	4											.155	.155	Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	VERT					
624-HG18	5	UP TO 24 LEADS $\frac{15,24 \times 2,54}{.600 \times .100}$			.155				.155	Adapts LSI to 14 and 16 pin IC patterns on .300 × .100 × .300 row centers	HORIZ						
624-HG16	6									.155	.155	.155	Adapts LSI to 14 and 16 pin IC patterns on .300 × .100 × .300 row centers	HORIZ						
624-HG19	7												.155	.155	.155	Adapts LSI to 14 and 16 pin IC patterns on .300 × .100 × .300 row centers	HORIZ			
624-HG20	8	UP TO 28 LEADS $\frac{15,24 \times 2,54}{.600 \times .100}$.035				.155	.155	.155	Adapts LSI to Universal board for- mat .300 row centers				HORIZ				
628-HG16	9		SQUARE .025	DIM A .500		BRASS	TIN	30 MICRO- INCHES				Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	VERT							
628-HG16F	9A												.155	.155	.155	.155	.155	.155	VERT	
628-HG16F-T																			.155	.155
628-HG16F-2T		.155			.155				.155	.155	.155									



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PART NUMBER DESIGNATIONS (cont.)

PART 1 NUMBER	FIG.	ACCEPTS COMPONENT SIZE	THRU HOLE	PIN CONFIGURATION					APPLICATION	FORMAT
				STYLE DIM. REF.	LENGTH REF.	MATERIAL	PLATING	PLATING THICKNESS		
628-HG21F	9 9A		.045		DIM B .470					VERT
640-HG16	10			ROUND .018 DIA REF	.155	PHOSPHOR BRONZE	GOLD	20 MICRO- INCHES		VERT
640-HG16F			.035					30 MICRO- INCHES		VERT
640-HG16F-T	10 10A	UP TO 40 LEADS $\frac{15.24 \times 2.54}{.600 \times .100}$		SQUARE .025	DIM A .500	BRASS	TIN	200 MICRO- INCHES MIN		VERT
640-HG16F-2T										VERT
640-HG21F			.045		DIM B .470		GOLD			VERT
640-HG18	11									VERT
640-HG20	12		.035	ROUND .018	.155	PHOSPHOR BRONZE		20 MICRO- INCHES	Adapts to Universal board format .300 × .300 ×.300 row centers	HORIZ

MATERIAL SPECIFICATIONS

BOARD062" thick FR 4 Glass Epoxy, 2 ounces Copper circuitry, FL-GFN062C2/0 AIIIB per Mil-P-13949, rated 94V-2 or better

PLATING 200 Micro-inch nominal Electro Tin

PIN A) Phosphor Bronze per QQ-P-330, Comp. A
B) Brass per QQ-B-626

PLATING A) Gold, refer to part number designation for thickness, all plating thicknesses are specified as nominal
B) Tin, refer to part number designation for thickness

PERFORMANCE CHARACTERISTICS

BULK RESISTANCE 8 Milliohms max

CAPACITANCE 4 Pico Farads max

CURRENT 3 Amp DC (pin rating)

OPERATING VOLTAGE ..
500 Volts, not to exceed
limit of interconnected
device

DIELECTRIC WITH-
STANDING VOLTAGE

(DWV) 1000 Volts at sea level,
300 Volts at 50,000 feet

INSULATION

RESISTANCE 2×10^7 Ohms

OPERATING TEMPER-

ATURE RANGE -50°C to +125°C

SOLDERABILITY Per Mil. Std. 202,
Method 208

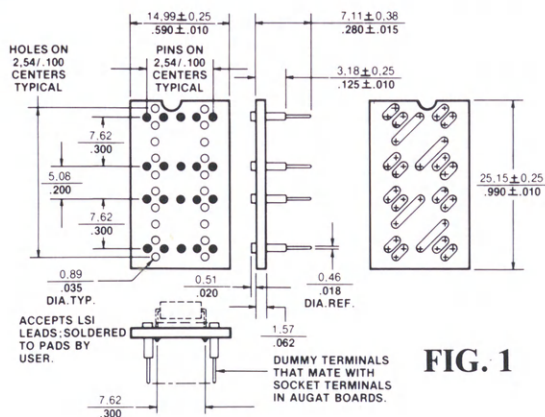


FIG. 1

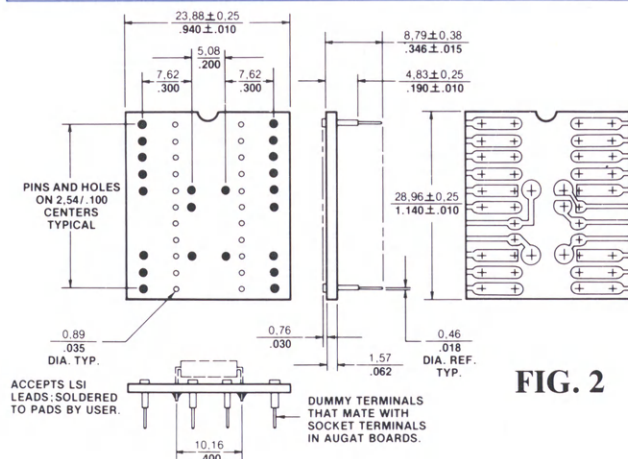


FIG. 2

600-HG Series

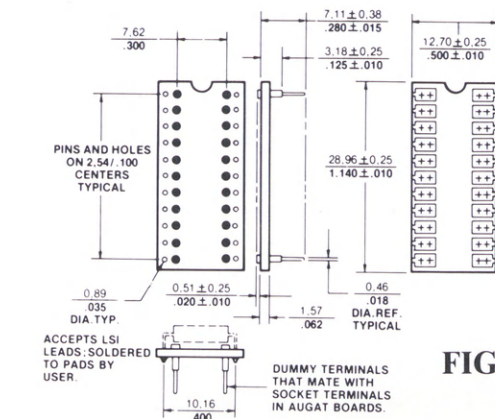


FIG. 3

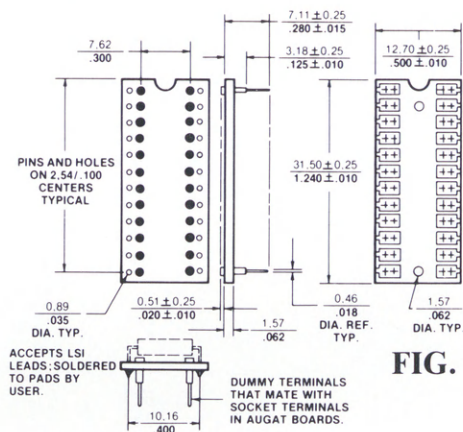


FIG. 4

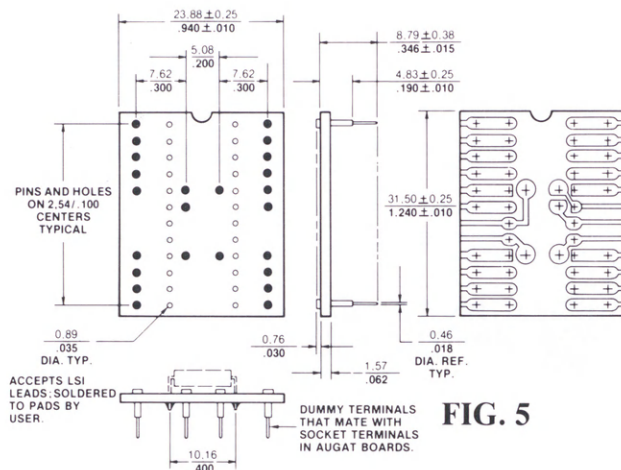


FIG. 5

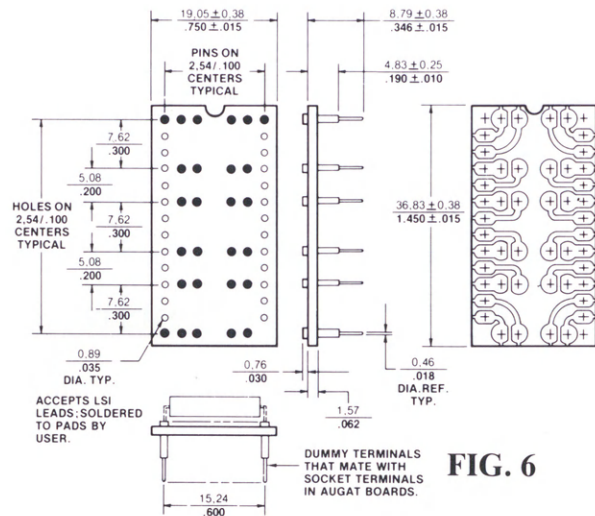


FIG. 6

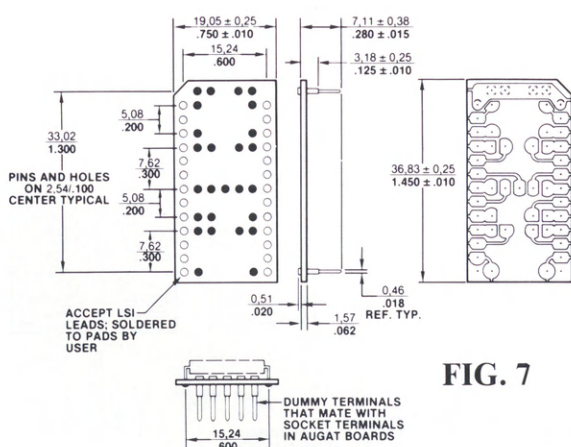


FIG. 7

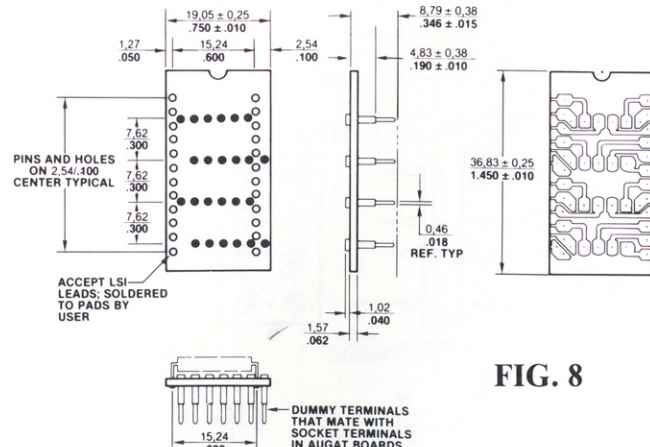


FIG. 8

600-HG Series

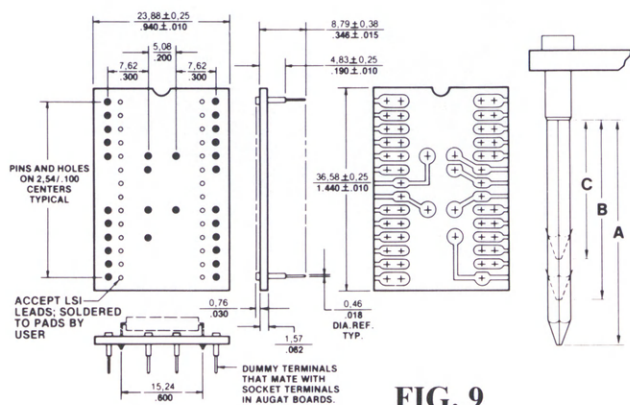


FIG. 9

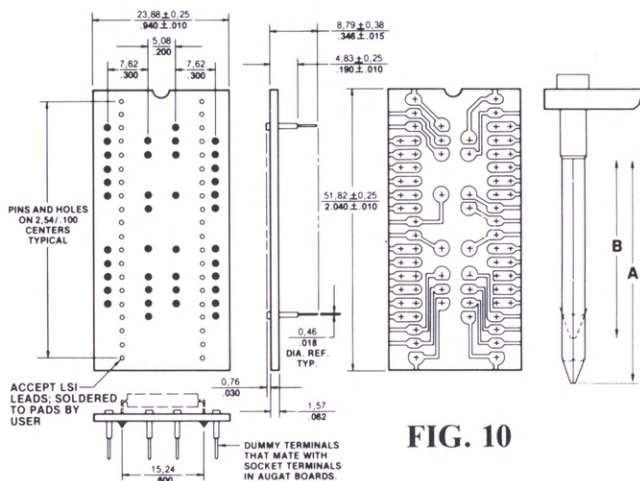


FIG. 10

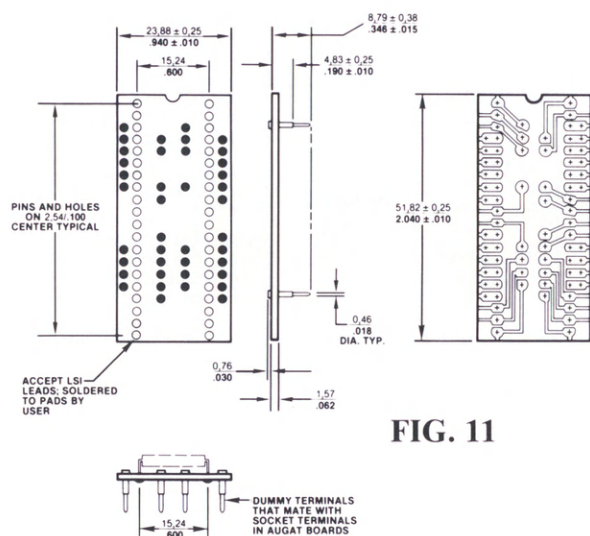


FIG. 11

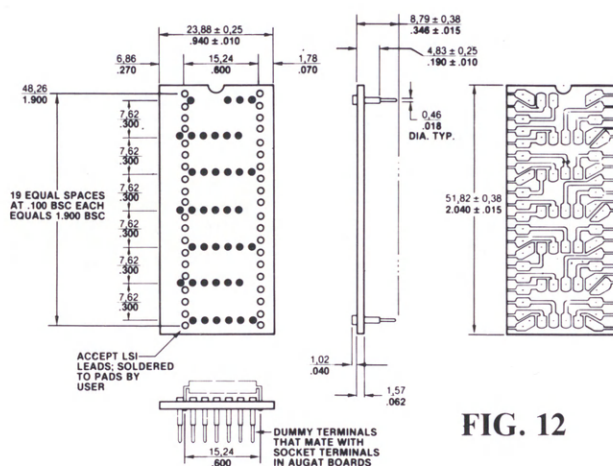


FIG. 12

Dimensions Specified in:

Millimeter
Inch

Millimeter/Inch

Tolerance: $\pm 0.13/005$
Unless otherwise specified

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet. Current drawings and specs are available upon request.

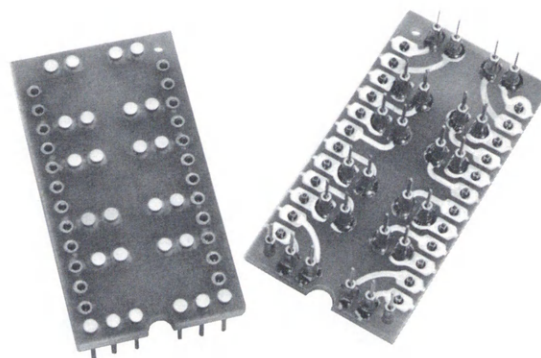
HOLTITE® Socket LSI Adaptor Plug

600-HG-HT Series

MACHINED PIN ADAPTORS

The 600-HG-HT family of LSI adaptors is similar to the 600-HG family, the I.C. need not be soldered however because Holtite® Zero Profile socket contacts in the adaptor allow for the convenience and economy of pluggability.

- Adaptor plugs are designed to interpose LSI packages to Augat patterned and universal style boards
- Designed for 20 thru 64 lead LSI devices on .300", .400", and .600" spacing
- Adaptor pins are located to prevent improper positioning within the patterned area



624-HG16-HT

- LSI package is socketed into Holtite® Zero Profile socket contacts, thus promoting interchangeability of different IC's without the need to solder IC to adaptor

PART NUMBER DESIGNATIONS

PART NUMBER	FIG.	ACCEPTS COMPONENT	PIN CONFIGURATION					SOLDERLESS WRAP PANEL INTERFACE	
			STYLE REF. DIM.	INTERFACE PIN STYLES	LENGTH REF.	MATERIAL	PLATING THICKNESS	APPLICATION	FORMAT
616-HG2-HT	1	16 Pin Square Devices $\frac{1.91}{.075}$ Spaced	Round .018"	4	.145	Brass	20 Micro- inches Gold	16 Pin square pkg. to IC patterns on .300 × .200 × .300 row centers	VERT
620-HG16-HT	2	Up to 20 Leads $\frac{7.62 \times 2.54}{.300 \times .100}$		2	.155	Phosphor Bronze		Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	HORIZ
622-HG18-HT	3	Up to 22 Leads $\frac{10.16 \times 2.54}{.400 \times .100}$	Square .025"	N/A	.470	Brass	10 Micro- inches Gold	Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	VERT
624-HG16-HT	4	Up to 24 Leads $\frac{15.24 \times 2.54}{.600 \times .100}$	Round .018"	1	.155	Phosphor Bronze	20 Micro- inches Gold on dummy pins	Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	HORIZ
624-HG29-HT	5A	24 Pin DIPS $\frac{7.62 \times 2.54}{.300 \times .100}$		4	.145	Brass		10 Micro- inches Gold on Socket Terminal pins.	Adapts 24 pin DIPs on .300 row centers up to .400 row centers	VERT (24 Pin DIP Adaptors)
624-HG26-HT	5B						Adapts 24 pin DIPs on .300 row centers up to .600 row centers		
624-HG28-HT	5C	24 Pin DIPS $\frac{10.16 \times 2.54}{.400 \times .100}$					Adapts 24 pin DIPs on .400 row centers down to .300 row centers		

*Consult factory for 28 position adaptors or sizes not shown. Manufactured under one or more of U.S. patents 4,097,101 and 4,097,810 and patents in foreign countries.



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600-HG-HT Series

PART NUMBER DESIGNATIONS

PART NUMBER	FIG.	ACCEPTS COMPONENT	PIN CONFIGURATION					SOLDERLESS WRAP PANEL INTERFACE		
			STYLE REF. DIM.	INTERFACE PIN STYLES	LENGTH REF.	MATERIAL	PLATING THICKNESS	APPLICATION	FORMAT	
624-HG24-HT	5 D	24 pin DIPs $\frac{10,16 \times 2,54}{.400 \times .100}$	Round .018	4	.145	Brass	20 Micro- inches Gold on dummy pins	Adapts 24 pin DIPs on .400 row centers up to .600 row centers	VERT (24 pin DIP Adapters)	
624-HG25-HT	5 E	24 pin DIPs $\frac{15,24 \times 2,54}{.600 \times .100}$					10 Micro- inches Gold on socket terminal pins	Adapts 24 pin DIPs on .600 row centers down to .300 row centers		
624-HG22-HT	5 F							Adapts 24 pin DIPs on .600 row centers down to .400 row centers		
624-HG116-HT	6	16 pin DIPs $\frac{7,62 \times 2,54}{.300 \times .100}$		20 Micro- inches Gold	Special adaptor for 16 pin DIPs. See Fig. 6.	VERT				
632-HG16-HT	7	Up to 32 Leads $\frac{22,86 \times 2,54}{.900 \times .100}$			2	.155	Phosphor Bronze	Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	HORIZ	
632-HG17-HT	8	Up to 32 Leads $\frac{22,86 \times 2,54}{.900 \times .100}$			4	.145	Brass	Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	VERT	
640-HG16-HT	9	Up to 40 Leads $\frac{15,25 \times 2,54}{.600 \times .100}$			1	.155	Phosphor Bronze			VERT
640-HG22-HT	10				2				Adapts LSI to ECL Panels on .300 × .100 × .300 row centers	VERT
648-HG16-HT	11	Up to 48 Leads $\frac{15,25 \times 2,54}{.600 \times .100}$			2				Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	HORIZ
648-HG1-HT	12	Up to 48 Leads quad in-line devices $\frac{15,25 \times 2,54}{.600 \times .100}$ $\frac{20,32 \times 2,54}{.600 \times .100}$.800 × .100			2				Adapts quad in-line devices to 14 and 16 pin IC patterns on .300 × .100 × .300 row centers	VERT
648-HG2-HT	13				2				Adapts quad in-line devices to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	HORIZ
648-HG3-HT	14				2				Adapts quad in-line devices to universal IC patterns on .300 × .300 × .300 row centers	HORIZ
664-HG1-HT	15	Up to 64 Leads quad in-line devices $\frac{10,16 \times 2,54}{.400 \times .100}$ $\frac{15,25 \times 2,54}{.600 \times .100}$.600 × .100		4	.145	Brass	200 to 400 Micro- inches Tin	Adapts quad in-line devices to universal IC patterns on .300 × .300 × .300 row centers	VERT	
664-HG16-HT	16	Up to 64 Leads $\frac{22,86 \times 2,54}{.900 \times .100}$		2	.155	Phosphor Bronze	20 Micro- inches Gold	Adapts LSI to 14 and 16 pin IC patterns on .300 × .200 × .300 row centers	HORIZ	

*Consult factory for 28 position adaptors or styles not shown.

600-HG-HT Series

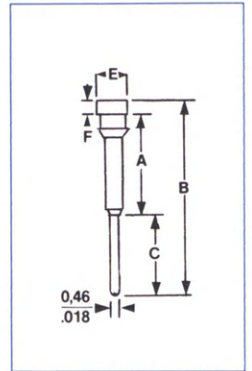
MACHINED PIN ADAPTORS

MATERIAL SPECIFICATIONS

BOARD .....	.062" thick FR 4 Glass Epoxy, 2 ounces Copper Circuitry, FL-GFN062C2/0 AIIIB per Mil-P-13949, rated 94V-2 or better
PLATING	200 Micro-inch Electro Tin
PINS	Phosphor Bronze per QQ-P-330, Comp. A or Brass per QQ-B-626
PLATING	Gold, refer to part number designation for thickness or Tin, refer to part number designation for thickness
CONTACT	Beryllium Copper, 30u" Gold plated

PERFORMANCE CHARACTERISTICS

BULK RESISTANCE	8 Milliohms max
CAPACITANCE	4 Pico Farads max
CURRENT	3 Amp DC (pin rating)
OPERATING VOLTAGE	500 Volts, not to exceed limit of interconnected device
DIELECTRIC WITHSTAND- ING VOLTAGE (DWV)	1000 Volts at sea level, 300 volts at 50,000 feet
INSULATION RESISTANCE ...	2×10^7 Ohms
OPERATING TEMPERATURE ..	-50°C to + 125°C
SOLDERABILITY	Per Mil. Std. 202, Method 208



INTERFACE PIN

INTERFACE PIN STYLES

PIN REFERENCE NUMBER	PART NUMBER	A ± .010	B ± .005	C ± .005	D ± .001	E ± .001	F ± .002
1	8128-44P2	$\frac{4.83}{.190}$	$\frac{9.55}{.376}$	$\frac{3.94}{.155}$	$\frac{1.41}{.056}$	$\frac{1.57}{.062}$	$\frac{0.76}{.030}$
2	8149-3P4	$\frac{3.18}{.125}$	$\frac{7.62}{.300}$	$\frac{3.94}{.155}$	$\frac{1.02}{.040}$	$\frac{1.27}{.050}$	$\frac{0.51}{.020}$
3	8149-3P2	$\frac{1.57}{.062}$	$\frac{6.05}{.238}$	$\frac{3.94}{.155}$	$\frac{1.02}{.040}$	$\frac{1.27}{.050}$	$\frac{0.51}{.020}$
4	8128-94P3/P4	$\frac{3.43}{.135}$	$\frac{7.62}{.300}$	$\frac{3.68}{.145}$	$\frac{0.99}{.039}$	$\frac{1.27}{.050}$	$\frac{5.08}{.020}$

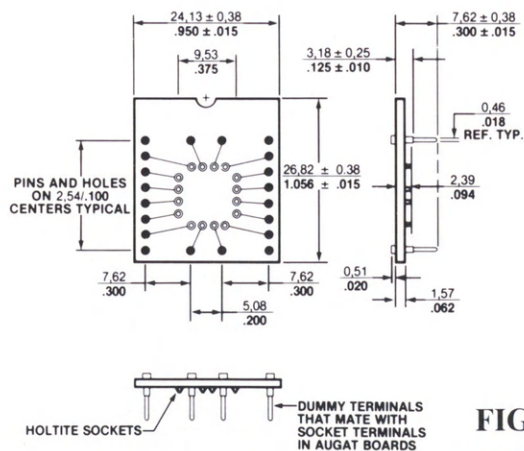


FIG. 1
616-HG2-HT

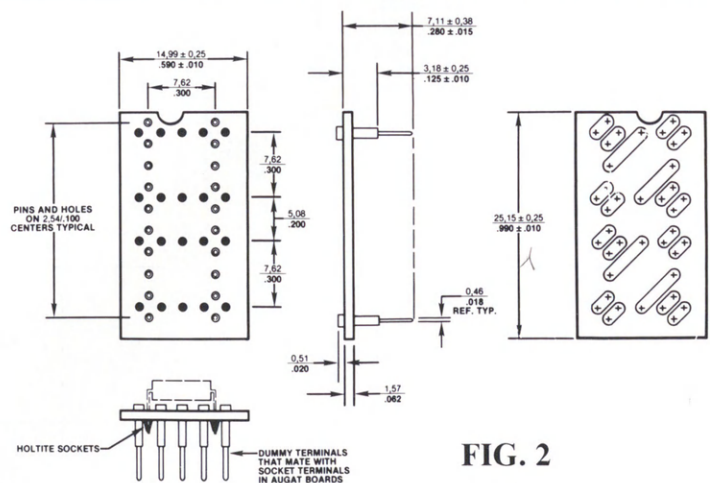


FIG. 2
620-HG16-HT

600-HG-HT Series

MACHINED PIN ADAPTORS

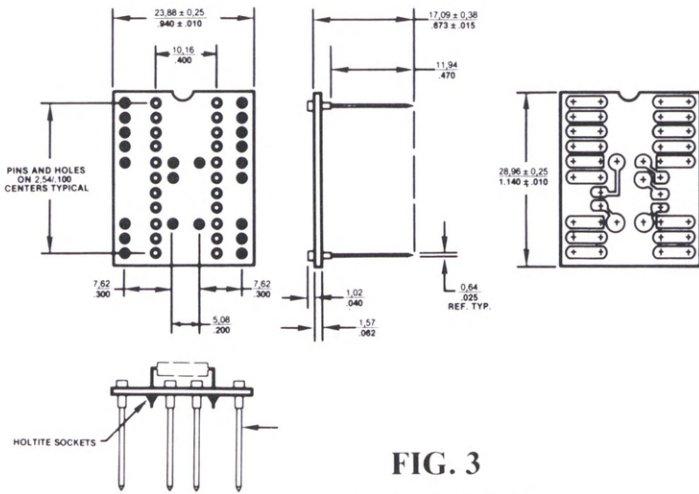


FIG. 3
622-HG18-HT

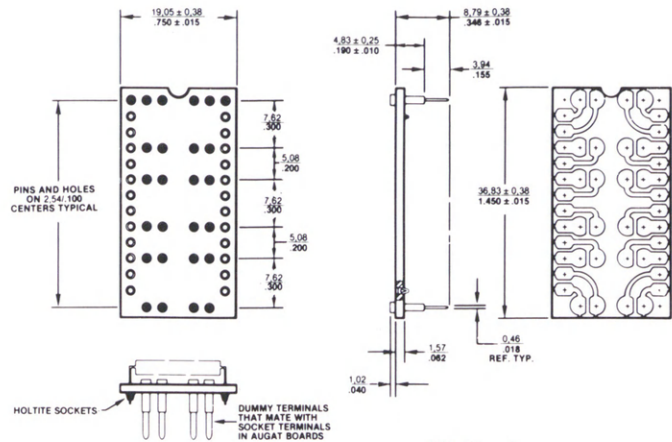


FIG. 4
624-HG16-HT

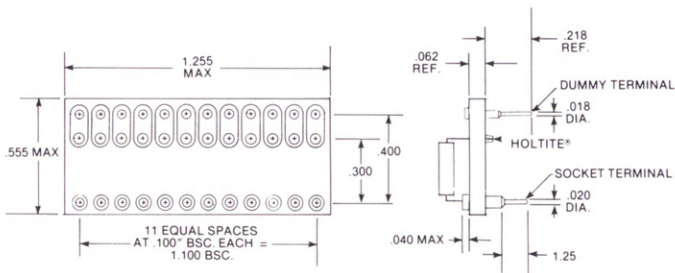


FIG. 5A
624-HG29-GHT .300" TO .400"

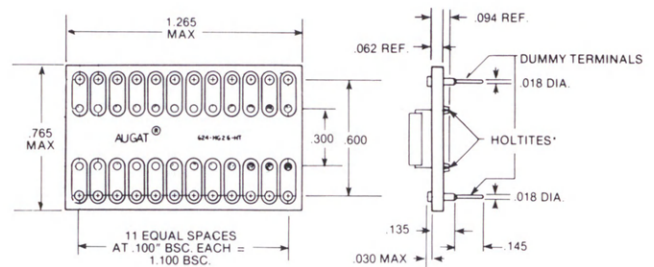


FIG. 5B
624-HG26-HT .300" TO .600"

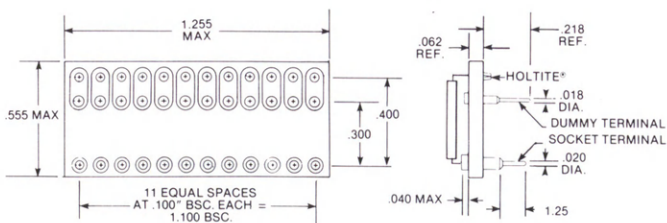


FIG. 5C
624-HG28-HT .300" TO .400"

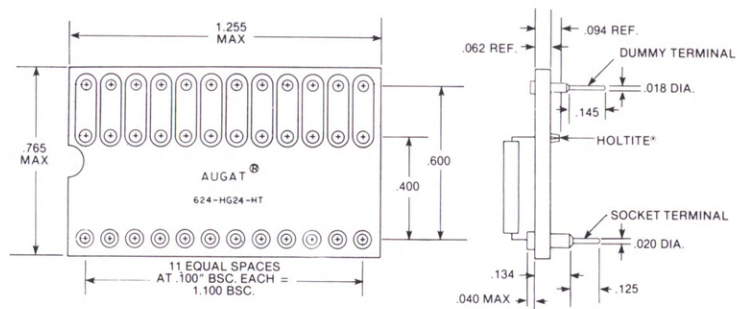


FIG. 5D
624-HG24-HT .400" TO .600"

600-HG-HT Series

MACHINED PIN ADAPTORS

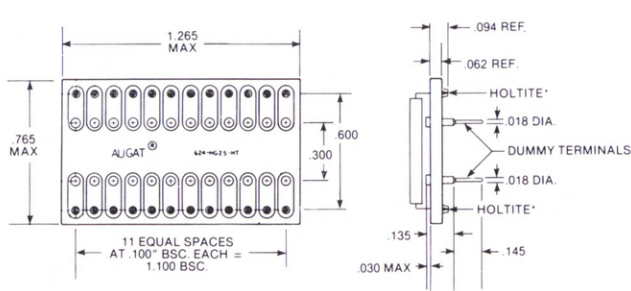


FIG. 5E
624-HG25-HT .600" TO .300"

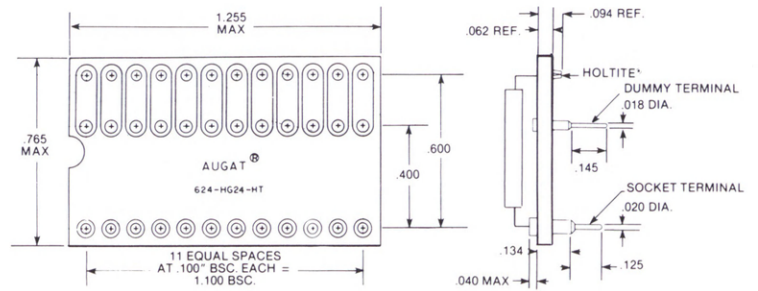


FIG. 5F
624-HG22-HT .600" TO .400"

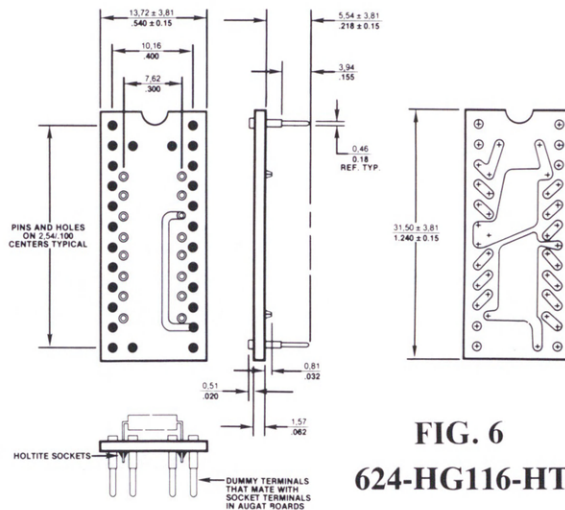


FIG. 6
624-HG116-HT

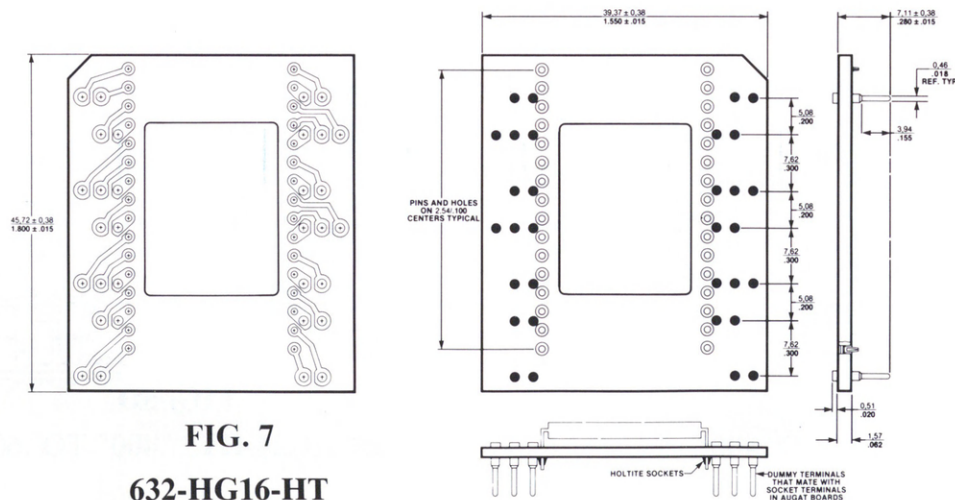


FIG. 7
632-HG16-HT

600-HG-HT Series

MACHINED PIN ADAPTORS

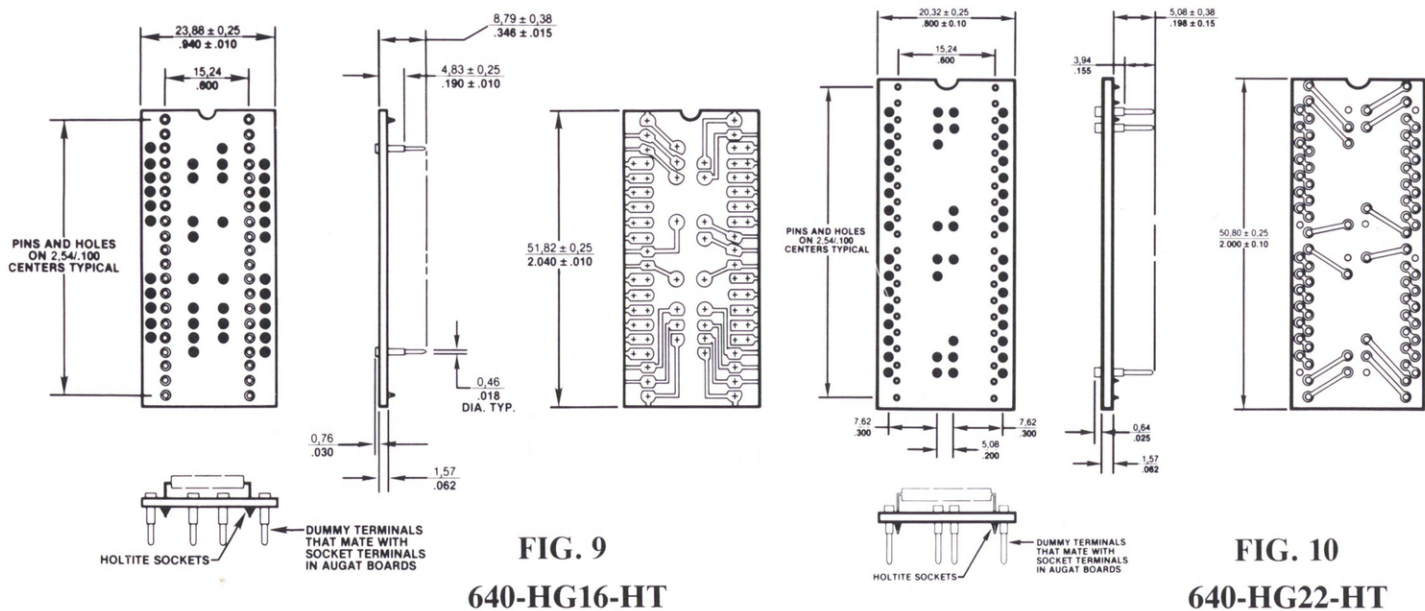
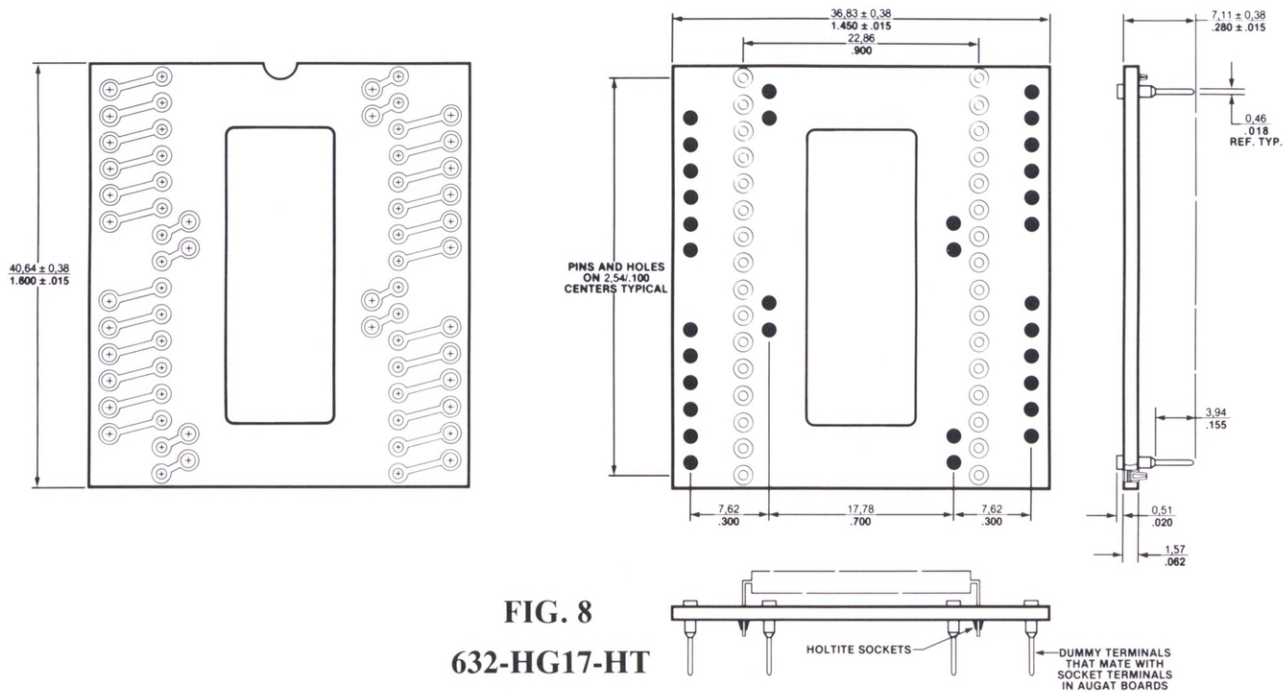
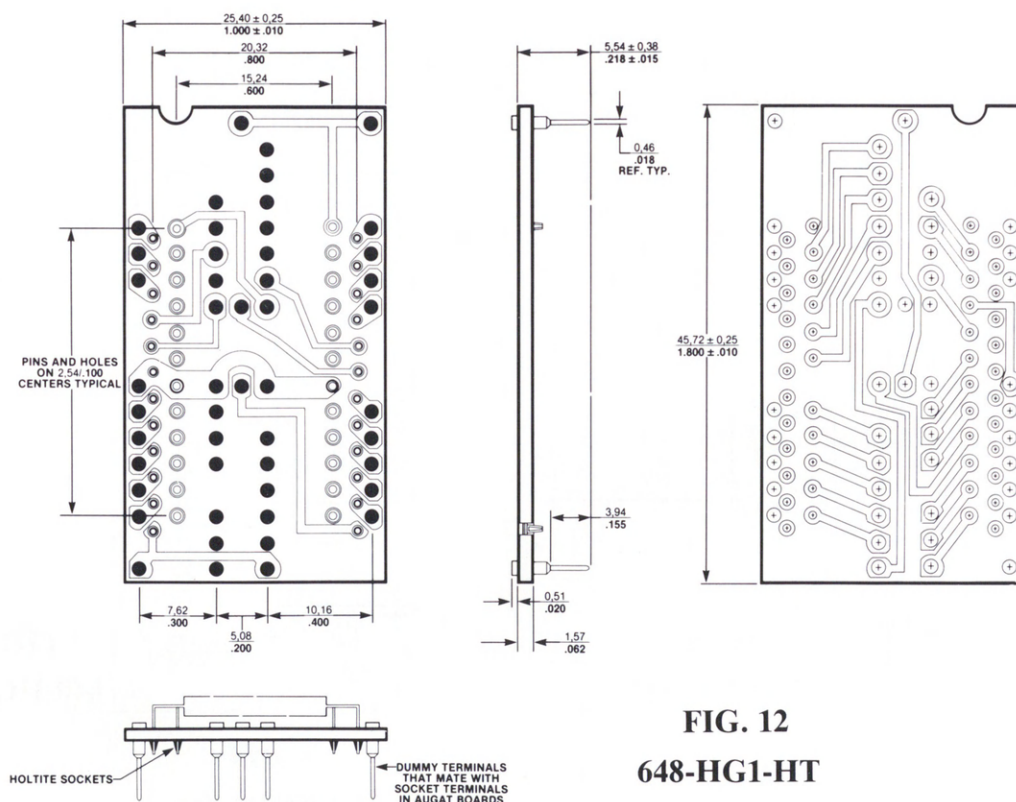
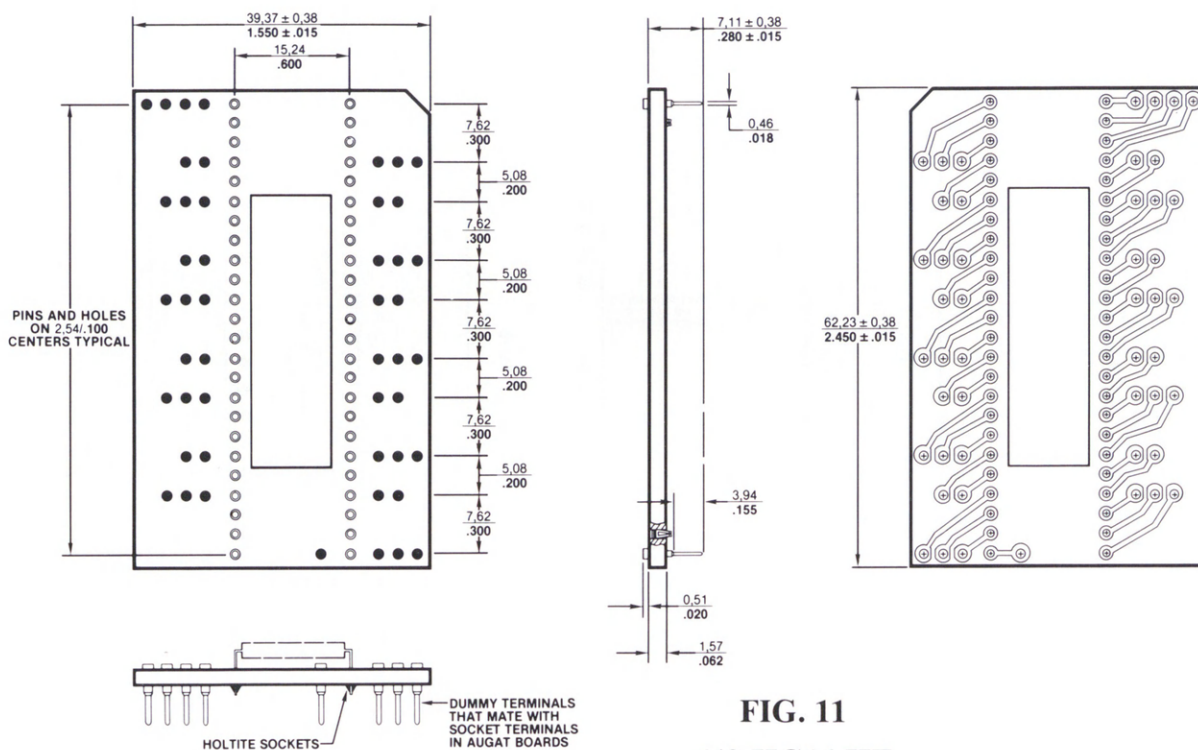


FIG. 10
640-HG22-HT

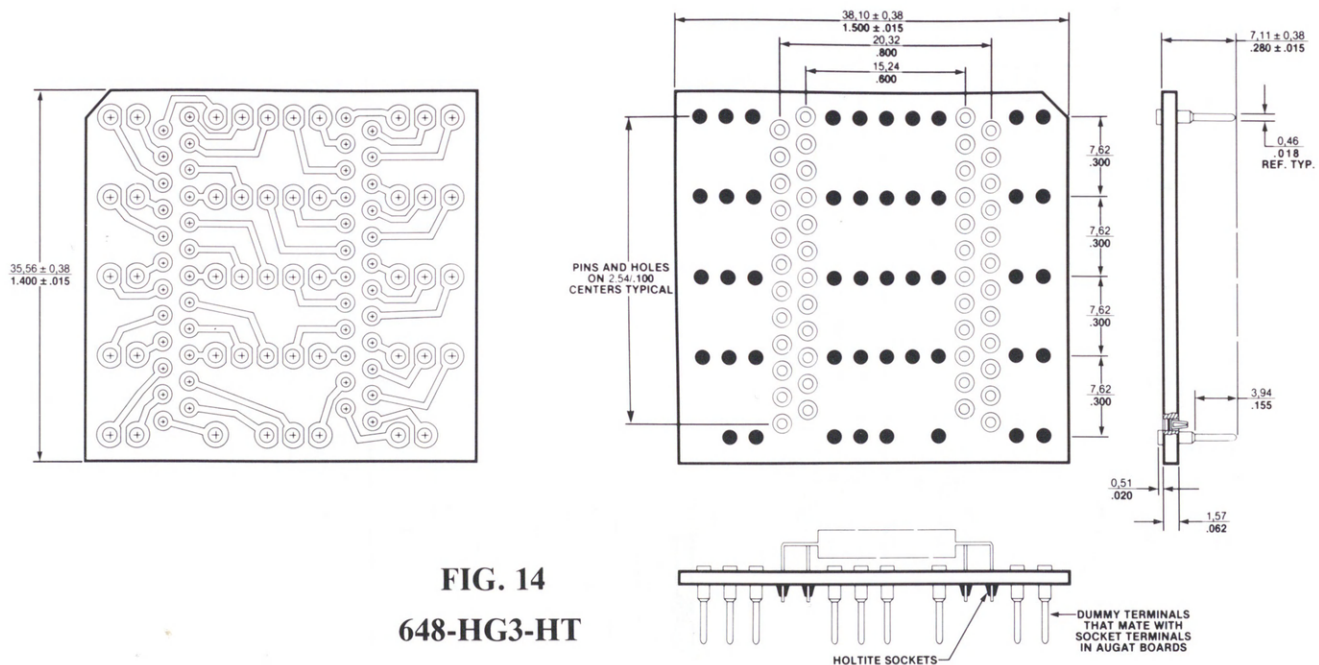
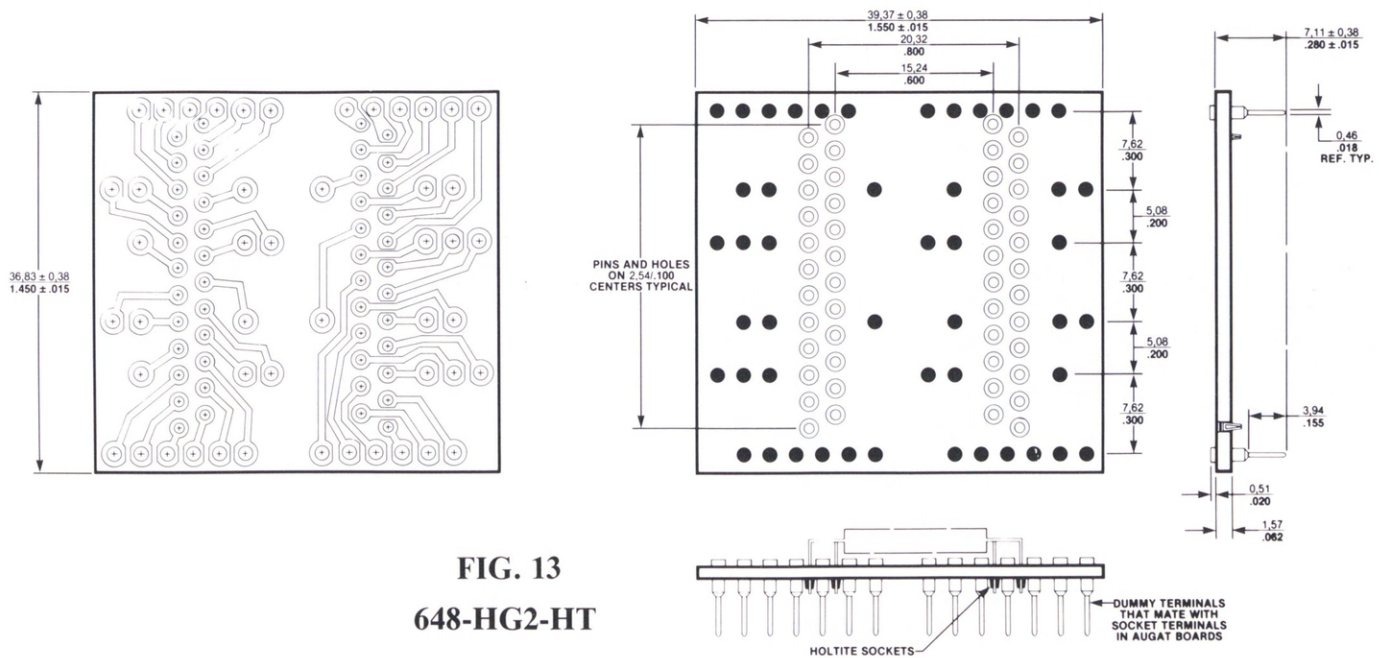
600-HG-HT Series

MACHINED PIN ADAPTORS



600-HG-HT Series

MACHINED PIN ADAPTORS



MACHINED PIN ADAPTORS

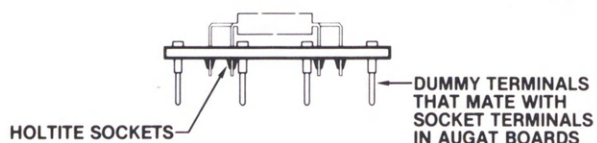


FIG. 15

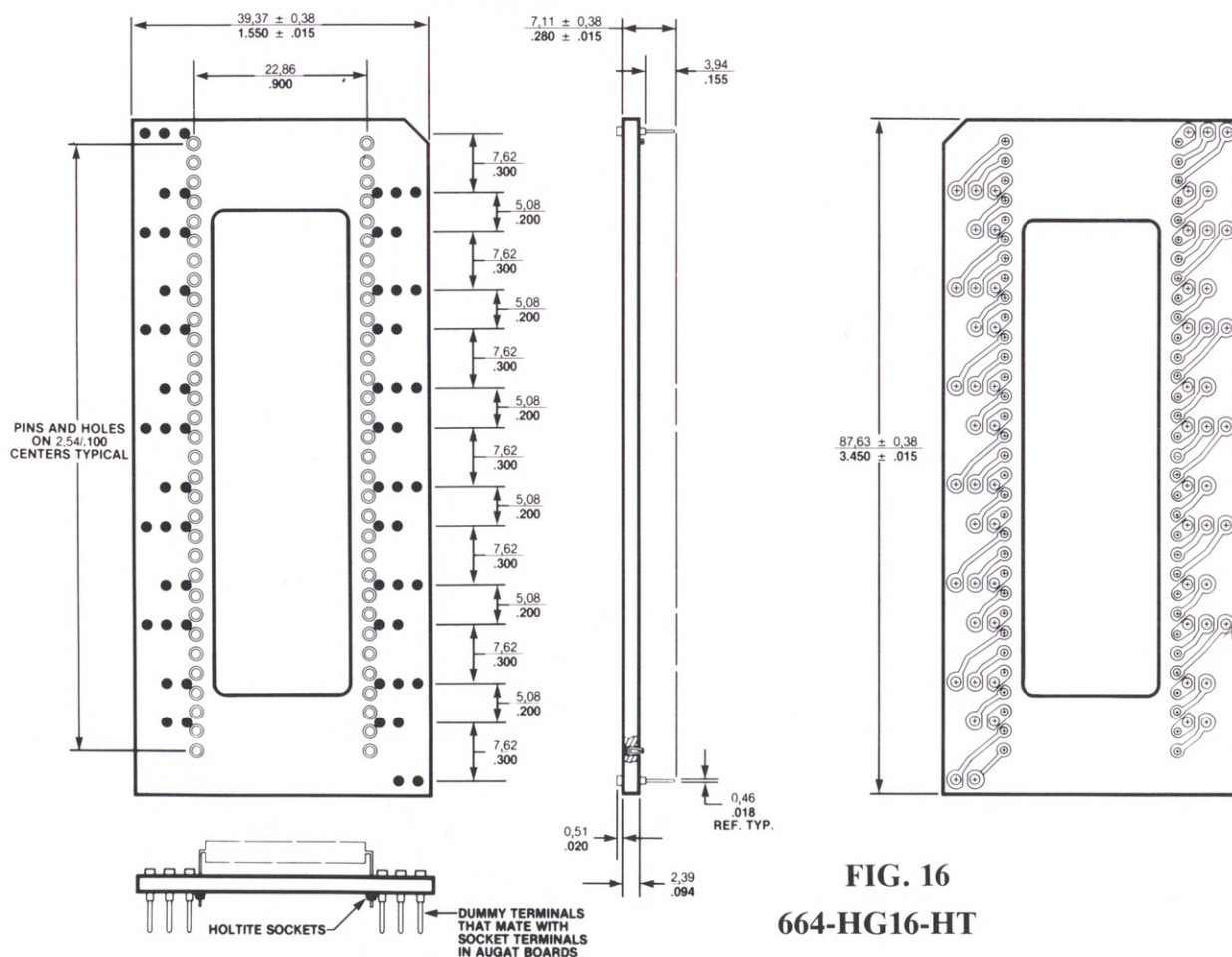


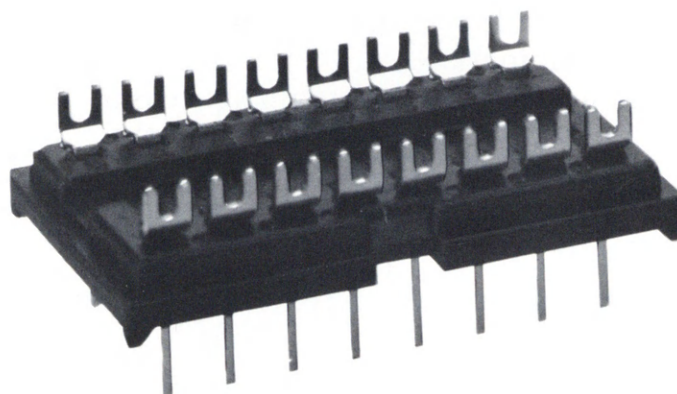
FIG. 16

Stamped Contact Component Carriers

600-DG
Series

The 600-DG Series is an economical stamped contact component carrier which is available with or without a cover. Used to assemble discrete circuits, rectangular leads allow the component carrier to be plugged into standard sockets or soldered directly to printed wiring boards.

- Phosphor Bronze Pins, Gold or Tin/Lead plated
- Stamped contacts for greater economy
- Ideal for component mounting and specific programming requirements
- Covers can be ordered separately to protect components and allow for potting



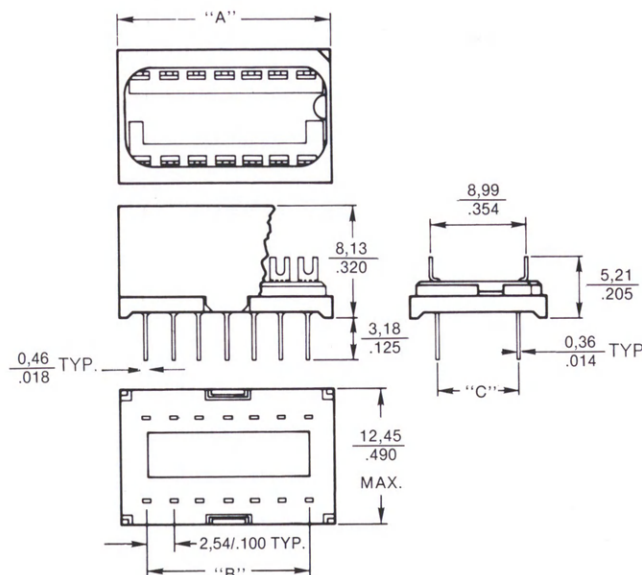
616-DG5

MATERIAL SPECIFICATIONS

INSULATORS	Thermoplastic polyester, UL rated 94V-0
PINS	A) Gold plated configuration <ul style="list-style-type: none"> • Phos. Bronze CDA 510 • 20 Micro-inches Au minimum per Mil-G-45204
	B) Tin/Lead plated configuration <ul style="list-style-type: none"> • Phos. Bronze CDA 510 • 200 Micro-inches Tin/Lead

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet.

NO. OF PINS	PIN STYLE	PART NUMBER	PLATING	A + .010	B TYP	C + .005
14	Slotted	614-DG5	Gold	(19,91) .784	(15,24) .600	(7,62) .300
	Slotted	614-DG6	Tin/Lead			
16	Slotted	616-DG5	Gold	(22,45) .884	(17,79) .700	(7,62) .300
	Slotted	616-DG6	Tin/Lead			
14 Position Cover		614-2P1				
16 Position Cover		616-2P2				

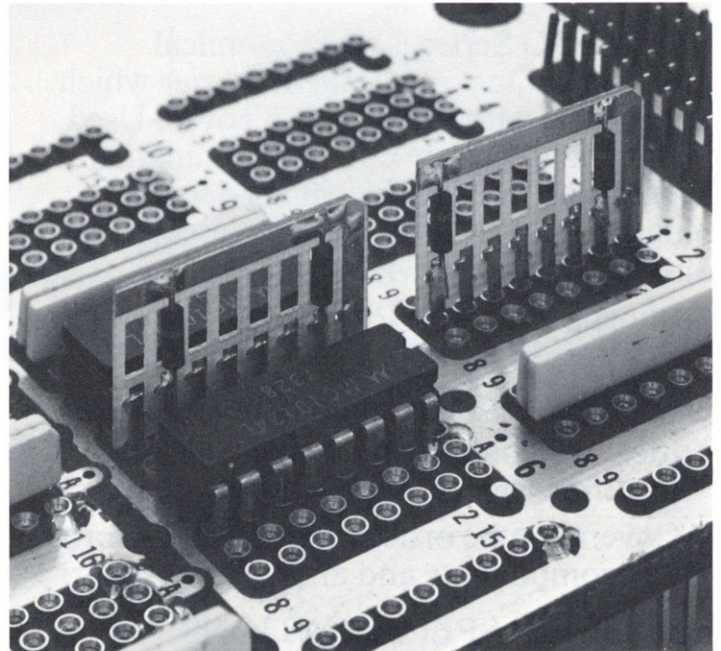


Single Inline Adaptor

608-DG6
Series

The 608-DG6 is an economical circuit board style adaptor, used to construct special termination or filter circuits. Used for applications where circuit space is a premium, less than .050" wide without components. It can be plugged into standard inline sockets or soldered directly to P.C.B.

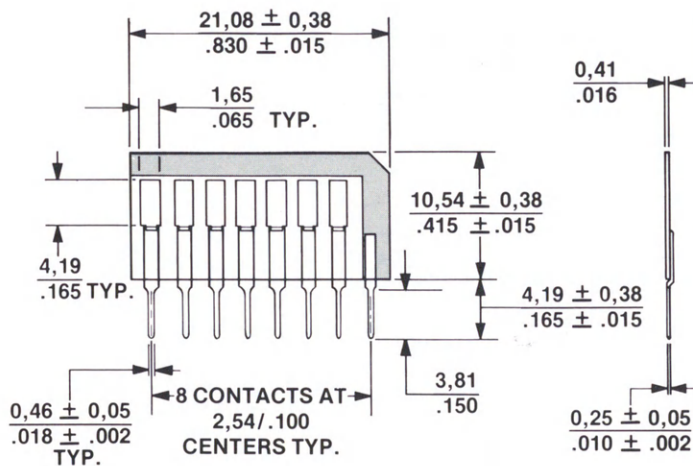
- Accepts up to seven resistors, capacitors or diodes
- Flexible, time-saving approach permits all components to be installed on same side of board
- Simply solder components onto adaptor and plug into board pattern
- Pin number (1) connected to common buss



PART NO. 608-DG6

MATERIAL SPECIFICATIONS

PRINTED 1/64 inch thick glass epoxy,
CIRCUIT 2 oz. Copper circuitry, Tin plated
BOARD one side
TERMINALS .. Phosphor Bronze, Tin plated



Dimensions Specified In:

Millimeter	Millimeter/Inch
Inch	

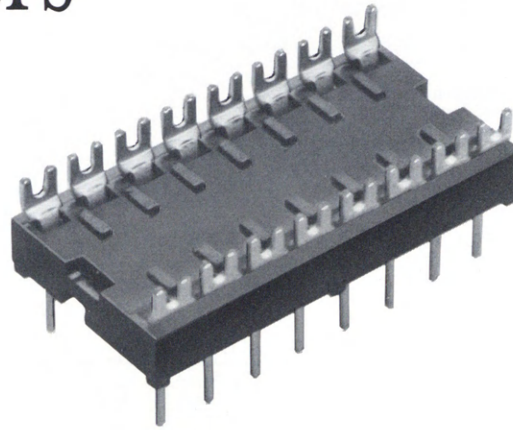
Tolerance: $\pm 0.13/005$
Unless Otherwise Specified

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet. Current drawings and specs are available upon request.

High Temperature Stamped Contact Component Carriers

1100
Series

The 1100 Series is an economical family of high temperature stamped contact component carriers. Available in 14, 16, 18, 22, 24, 28, 36 and 40 pin counts; all insulators are X-Y stackable. Rectangular IC leads allow carrier to be plugged into standard sockets or soldered directly to printed wiring boards. Carriers come packaged in automatic insertion equipment compatible plastic sleeves.



- High temperature thermoplastic insulator resists plastic deformation caused by soldering iron
- Phosphor Bronze pins Gold or Tin/Lead plated
- Stamped contact for low cost and high reliability
- 8 sizes for maximum adaptability
- X-Y stackable uses less printed wiring board space
- Used to make special circuits or programming jumpers

PART NUMBER DESIGNATIONS

PIN COUNT	ROW SPACING	GOLD PLATED	TIN/LEAD PLATED
14	.300	1114-3G1	1114-3G2
16		1116-3G1	1116-3G2
18		1118-3G1	1118-3G2
22	.400	1122-3G1	1122-3G2
24		1124-3G1	1124-3G2
28	.600	1128-3G1	1128-3G2
36		1136-3G1	1136-3G2
40		1140-3G1	1140-3G2

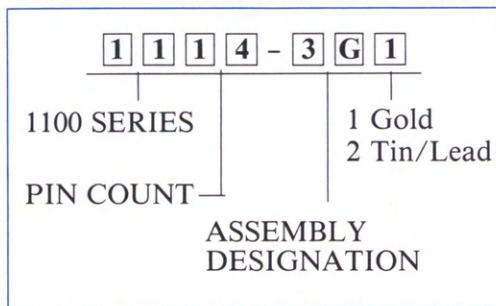
MATERIAL SPECIFICATIONS

INSULATOR	Glass filled polyetherimide (PEI), heat deflection temperature 230° C at 264 PSI, U.L. flammability rating 94V-0, Black
TERMINALS	Phosphor Bronze CDA 510
PLATING	Gold, 10μ inches, per Mil-G-45204 Tin/lead, 200μ inches Other plating options, consult factory

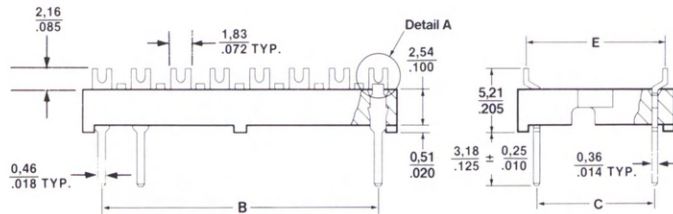
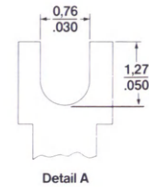
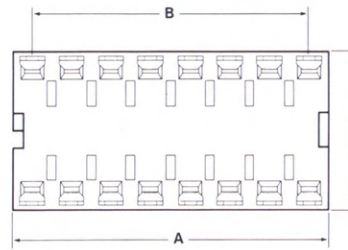


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PART NUMBER EXAMPLE



Dimesnsions Specified In:	
MILLIMETER	MILLIMETER/INCH
INCH	
Tolerance: $\pm 0,13/.005$ Unless otherwise specified	



DIMENSIONS

NO. OF PINS	PART NO.	A MAX	B BSC	C BSC	D MAX	E BSC
14	1114-3G	$\frac{17,78}{.700}$	$\frac{15,24}{.600}$	$\frac{7,62}{.300}$	$\frac{10,16}{.400}$	$\frac{8,99}{.354}$
16	1116-3G	$\frac{20,32}{.800}$	$\frac{17,78}{.700}$			
18	1118-3G	$\frac{22,86}{.900}$	$\frac{20,32}{.800}$			
22	1122-3G	$\frac{27,94}{1.100}$	$\frac{25,4}{1.000}$	$\frac{15,24}{.600}$	$\frac{17,78}{.700}$	$\frac{16,61}{.654}$
24	1124-3G	$\frac{30,46}{1.200}$	$\frac{27,94}{1.100}$			
28	1128-3G	$\frac{35,56}{1.400}$	$\frac{33,02}{1.300}$			
36	1136-3G	$\frac{45,72}{1.800}$	$\frac{43,18}{1.700}$	$\frac{50,80}{2.000}$	$\frac{48,26}{1.900}$	
40	1140-3G	$\frac{50,80}{2.000}$	$\frac{48,26}{1.900}$			

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	.2 Milliohms per terminal
CURRENT	3 Amps DC per contact
DIELECTRIC WITHSTANDING	
VOLTAGE (DWV)	1000 Volts RMS at atmospheric pressure 350 Volts RMS at 50,000 ft.
INSULATION RESISTANCE	5000 Megohms at atmospheric pressure
CAPACITANCE	2pF between contacts, all non connected points grounded
OPERATING TEMPERATURE	-55°C to 170°C
RESISTANCE TO SOLDERING	
HEAT	Tested for 10 sec. at 260° C \pm 5°C, Mil. Std. 202E, Method 210, Condition B
VIBRATION	15 G's from 10 to 2000 HZ, per Mil. Std. 1344, Method 2005, Condition III
SHOCK	100 G's per Mil. Std. 202E, Method 213, Condition I
MOISTURE RESISTANCE	2000 Megohms minimum, tested for 24 hours, Mil. Std. 202E, Method 6
SALT SPRAY	2 Milliohms max change, tested for 96 hours, Mil. Std. 1344A, Method 1001.1, Condition A
TERMINAL RETENTION	3 lb. axial load
SOLDERABILITY	Per Mil. Std. 202, Method 208

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet.

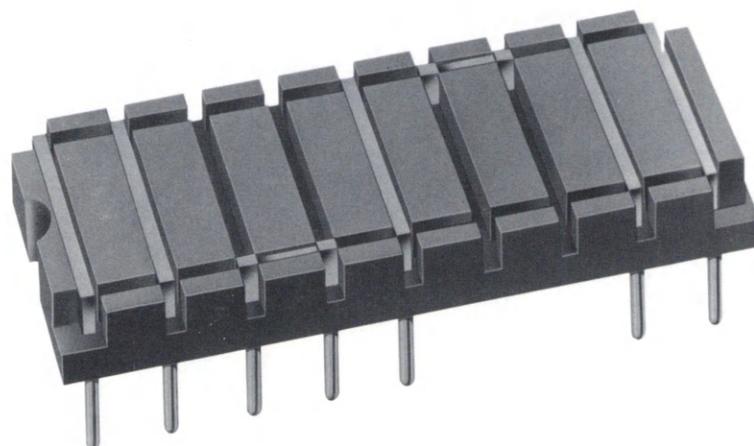


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Programming Jumper Plug Assemblies

8136-475 Series

8136-475 Series of programmed jumper plugs offer the unique combination of low cost and flexible signal path selection. Standard configurations are supplied programmed across rows. Special configurations are available with side by side and across row, intermixed programmed signal path variations.



- Low profile; only .100" high, X-Y stackability
- Available with Gold or Tin plating
- Available in standard units of 1, 2, 3, 4, 7, 8, 9 (double pin)
- Jumper pin assembly spans 7,62/.300" centers to connect opposing contacts in I.C. patterns, or 2,54/.100" centers to connect adjacent pins

- Also available in special configurations combining 2,54/.100" center shorting pins with 7,62/.300" center pins
- To allow greater flexibility, individual jumper pins and insulators are available for installation by the customer (simple press assembly)

MATERIAL SPECIFICATIONS

INSULATOR .. Thermoplastic polyester, UL rated 94V-0, Mil-P-46161 (MR) black

PIN Phosphor Bronze, 1/2 hard, QQ-B-750

PLATING Gold 30μ inches per Mil-G-45204 over 50u inches Nickel Tin 200μ inches per Mil-T-10727

PERFORMANCE CHARACTERISTICS

BULK RESISTANCE 10 Milliohms at .020 amps DC

CURRENT RATING 3 Amps DC

OPERATING VOLTAGE 500V RMS at atmospheric pressure

DIELECTRIC WITHSTANDING VOLTAGE (DWV) 2500V RMS for 5 seconds

INSULATION RESISTANCE 2×10^9 Ohms at 90% relative humidity

OPERATING TEMP. -65°C to + 125°C

SOLDERABILITY Mil. Std. 202, Method 208

PART NUMBER DESIGNATIONS

PART NO.	FIG.	NO. OF UNITS	DIM A.	PIN SPACING
8136-475G1	1	1	$\frac{2,54}{.100}$.300"
8136-475G2	2	2	$\frac{5,08}{.200}$	
8136-475G3	2	3	$\frac{7,62}{.300}$	
8136-475G4	2	4	$\frac{10,16}{.400}$	
8136-475G7	2	7	$\frac{17,78}{.700}$	

PART NO.	FIG.	NO. OF UNITS	DIM A.	PIN SPACING
8136-475G8	2	8	$\frac{20,32}{.800}$	.300"
8136-475G9	2	9	$\frac{22,86}{.900}$	
8136-651P2(Gold)	5	Jumper Pin	N/A	.100"
8136-651P3(Tin)	5	Jumper Pin	N/A	
8136-650P2(Gold)	4	Jumper Pin	N/A	.300"
8136-650P3(Tin)	4	Jumper Pin	N/A	

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet.

For tin-plated version of Figs. 1&2, use suffix "T" after part number. Example: 8136-475G1-T.

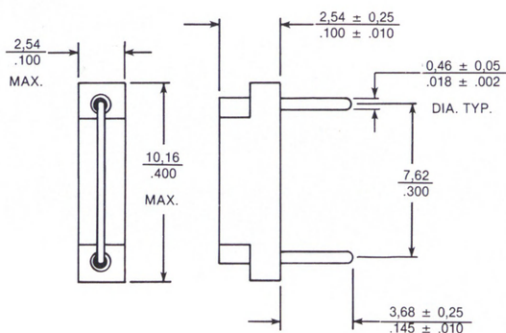


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8136 Series

Fig. 1
SINGLE UNIT

Side by side stackable



INSULATOR ONLY

SIZE	PART NO.	DIM. A
Insulator-1 Unit	8136-477P1	$\frac{2.54}{.100}$
Insulator-2 Units	8136-652P6	$\frac{5.08}{.200}$
Insulator-3 Units	8136-652P1	$\frac{7.62}{.300}$
Insulator-4 Units	8136-652P2	$\frac{10.16}{.400}$
Insulator-7 Units	8136-652P3	$\frac{17.78}{.700}$
Insulator-8 Units	8136-652P4	$\frac{20.32}{.800}$
Insulator-9 Units	8136-652P5	$\frac{22.86}{.900}$

PIN SPACING .100" CENTERS

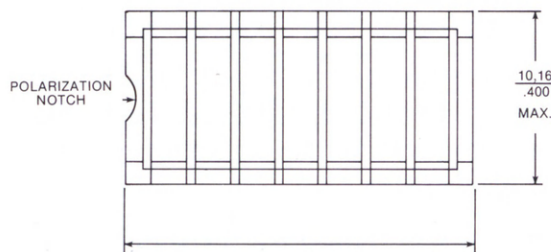


Fig. 2
STANDARD SIZES
*(2,3,4,7,8,9 Units)

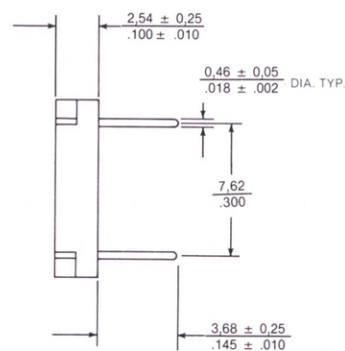
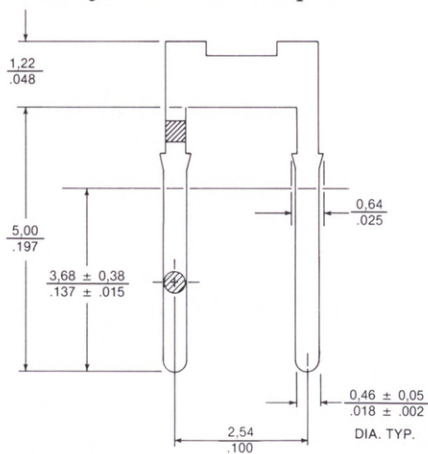


Fig. 3

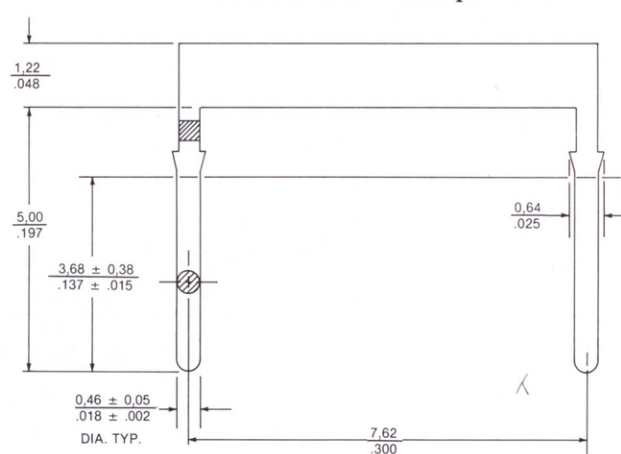
Adjacent Pin Jumper



JUMPER PINS

Fig. 4

Across Row Jumper Pin



PART NO. 8136-651P2 (Gold)
8136-651P3 (Tin)

Dimensions Specified In:

Millimeter
Inch

Millimeter/Inch

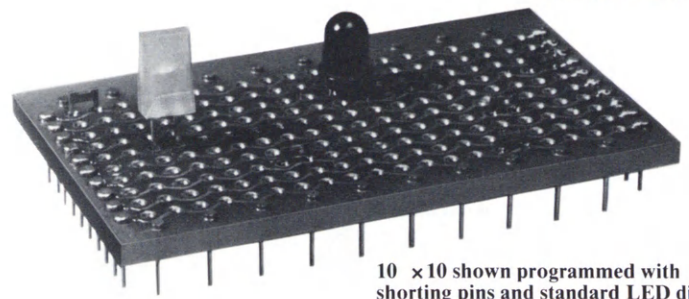
Tolerance: ±0.13/.005
Unless Otherwise Specified

PART NO. 8136-650P2 (Gold)
8136-650P3 (Tin)

X-Y Programming Matrix Boards

PJ4000 Series

PJ4000 Series is a unique low cost, low profile, high reliability method for X and Y signal programming. Available standard 4 × 10 thru 10 × 10 format or larger on special order. Signal programming is accomplished with very low mass. 0.10-inch jumper pins or with off-the-shelf components such as diodes, LED and capacitors which have up to .020-inch dia. leads on .100-inch centers.



10 × 10 shown programmed with shorting pins and standard LED diodes.

- Offers simple reliable and low cost means of switching or programming
- Large variety of row and column combinations available
- Typical uses:

Machine tool control
Vending machine control
Communication systems

Batching programmers
Sequence programmers
Gas pump control

Pulse code programmers
Analog function generators
Test equipment programming
Digital memories

- Can be programmed with low cost standard components, such as LED diodes, disk capacitors, small resistors, etc.
- Very low profile above PC board (.150")
- Available with PC pins or wire-wrappable pins
- Cross points are Holtite® 8134-HC-5P3

MATERIAL SPECIFICATIONS

INSULATORS	FR4, Blue glass epoxy, 2 oz. Copper circuitry, Tin/Lead plated
INTERFACE PINS	Brass per QQ-B-626, Alloy 360. 20μ" Gold plated (8128-94P4)
CONTACTS	Beryllium Copper per QQ-C-530 100μ" Tin/Lead plated (8134-HC-5P3)
SHORTING PINS	Phos. Bronze per QQ-B-750
	A) 30μ" Gold plated (8136-651P2)
	B) 200μ" Tin plated (8136-651P3)

PERFORMANCE CHARACTERISTICS

CONTACT RATING	50VDC, 100 Ma. Standard Operation. Regular rating of contact is 3 amps
BULK RESISTANCE	Gold: 15 Milliohms at 100Ma., using .016" dia. pin. Tin: 25 milliohms at 100 Ma., using .016" dia. pin
INSULATION RESISTANCE	1 x 10 ⁹ Ohms min. when tested per Mil. Std. 202C
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	1000 VRMS with a test pin of .016" dia. at 30-inch Hg (mercury), 14.7 PSI dry atmosphere; 250 VRMS at 0.9-inch Hg
WORKING VOLTAGE	100 Volts RMS at 30-inch Hg (mercury) 14.7 PSI dry atmosphere
CAPACITANCE	A) Column to row 4.5 pF average B) Column to column 4.3 pF average. C) Row to row 6.1 pF average
OPERATING TEMPERATURE	-55°C to + 125°C
VIBRATION	Panel shall meet the requirement of Method 204, Test Condition B of Mil. Std. 202 (10Hz to 2000Hz) with no shorting pins installed
MECHANICAL SHOCK	Panel shall meet the requirements of Method 204, Test Condition G of Mil. Std. 1344 with no shorting pins installed

PART NUMBER	SIZE	DIMENSIONS A ± .015	DIMENSION B	FIG.
PJ4041	10 × 4	26,42/1.040	9 equal spaces at .100" each	1
PJ4061	10 × 6	36,58/1.440	13 equal spaces at .100" each	1
PJ4081	10 × 8	46,74/1.840	17 equal spaces at .100" each	1
PJ4011	10 × 10	56,90/2.240	21 equal spaces at .100" each	1

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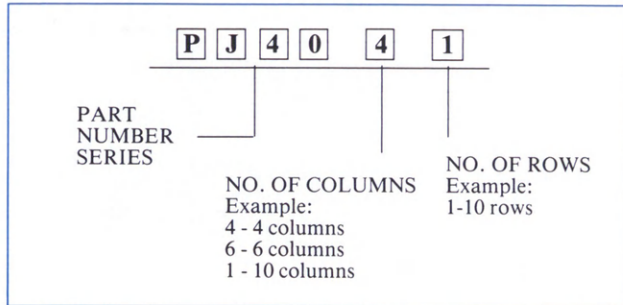
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PJ4000 SERIES

PART NUMBER EXAMPLE



Other Mechanical Options Available Upon Special Request:

- A. Wire-wrappable interface pins
- B. Any combination of Rows (X) and Columns (Y)
- C. 1-Gold interface PC pins with Tin contacts
 - 2-Tin interface PC pins with Tin contacts
 - 3-Gold wire-wrappable interface pins
 - 4-Tin wire-wrappable interface pins

DIMENSIONS

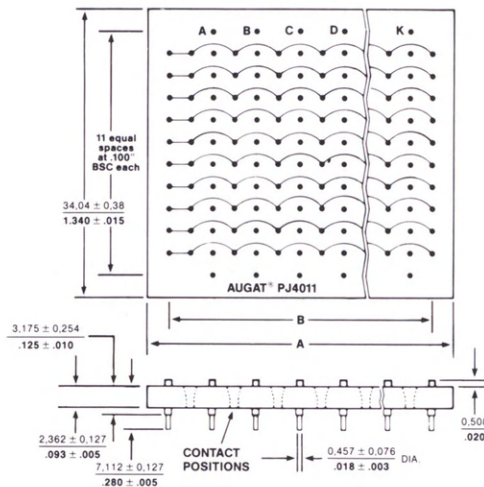


FIG. 1

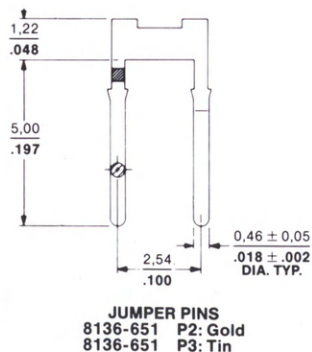
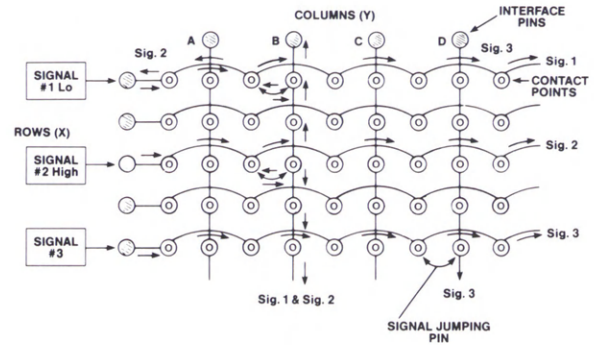


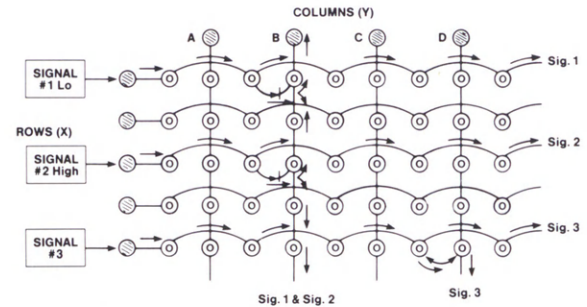
FIG. 2

APPLICATION NOTE: SWITCHING WITH SIGNAL JUMPING PINS



If more than one row is connected to any column, a reverse Bias Current can flow. In the example above, Signal 3 is connected to column D involving no complications as there is only a single source. But note that Signal 2 is higher than Signal 1. When both are connected to the same column, Signal 2 flows back into the Signal 1 source.

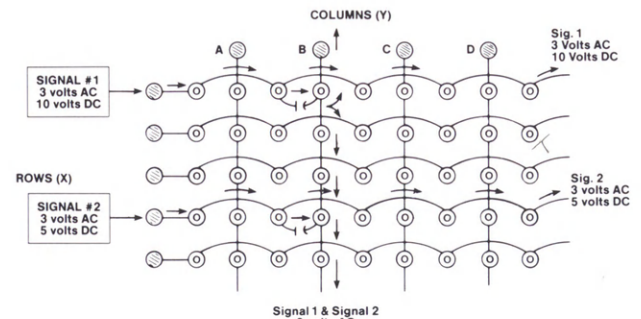
SWITCHING WITH DIODES



By using Diodes between Row 1 and Column B, and Row 3 and Column B, we have blocked Signal 2 from flowing back on Signal 1 and we have summed Signal 1 and Signal 2 at Column B.

Any variety of Diode may be used, including Germanium, Silicon or Light-Emitting Diodes (LED's), as long as the lead diameter is no greater than .020" and the lead spacing is .100".

SIGNAL COUPLING WITH CAPACITORS



NOTE: Capacitor is being used to block DC component of incoming signal.

Push Fit Test Jacks

8000
Series

(8000-MG, 8007, and 8011 Series)

The 8000 Series line of sub-miniature "Push-Fit" test jacks used in many applications such as meter probe inputs, crystal sockets, circuit test point identification and many others. A complete line of test points which will accommodate 1,02/.040; 1,27/.050; 2,03/.080 and 2,29/.090 diameter pins.

- Teflon insulator for extreme environments
- Complete range of platings available including cadmium
- Brightly colored Nylon for fast test point identification
- Tapered entry to guide test probe



PART NUMBER DESIGNATIONS

PART NUMBER	FIG.	PROBE DIAMETER	INSULATOR MATERIAL AND COLOR	CONTACT MATERIAL AND PLATING	"A" DIA. ± .002	MOUNTING HOLE ± .001
8007-1G1	2	.040	Teflon, Natural	Phosphor Bronze, 30μ" Gold over Nickel	.175	.162
8007-1G2	2A		Nylon, Blue	Phosphor Bronze, 300μ" Cadmium	.166	.162
8007-1G3	2A			Phosphor Bronze, 300μ" Tin	.166	.162
8007-1G4	2A			Phosphor Bronze, 300μ" Cadmium	.175	.162
8007-1G5	2		Teflon, Natural	Phosphor Bronze, 200μ" Tin	.166	.162
8007-1G6	2		Nylon, Black	Phosphor Bronze, 200μ" Tin	.166	.162
8007-1G7	2A				.166	.162
8007-1G8	2A		Nylon, Red		.166	.162
8000-MG1	1A	.050	Nylon, Blue	Phosphor Bronze, 300μ" Cadmium	.177	.172
8000-MG2	1		Teflon, Natural	Phos. Bronze, 30μ" Gold Over Nickel	.185	.172
8000-MG3	1			Phosphor Bronze, 200μ" Tin	.185	.172
8000-MG4	1		Nylon, Blue	Phos. Bronze, 30μ" Gold Over Nickel	.177	.172
8000-MG5	1A			Phosphor Bronze, 200μ" Tin	.177	.172
8000-MG6	1A				.177	.172
8000-MG7	1A				.177	.172
8000-MG8	1A		Nylon, White		.177	.172

8000 Series

PART NUMBER DESIGNATIONS (Cont.)

PART NUMBER	FIG.	PROBE DIAMETER	INSULATOR MATERIAL AND COLOR	CONTACT MATERIAL AND PLATING	"A" DIA. ± .002	MOUNTING HOLE ± .001
8011-8G1	3	.080	Nylon, Blue	Beryllium Copper, 200μ" Tin	.177	.172
8011-8G2	3		Nylon, Black		.177	.172
8011-8G3	3		Nylon, Red		.177	.172
8011-8G7	3		Nylon, Green		.177	.172
8011-8G8	3		Nylon, White		.177	.172
8011-8G9	3		Nylon, Orange		.177	.172
8011-8G10	3		Nylon, Yellow		.177	.172
8011-8G11	3		Nylon, Brown		.177	.172
8011-8G12	3		Nylon, Gray		.177	.172
8011-8G13	3		Nylon, Purple		.177	.172
8011-8G6	3	.090	Nylon, Blue	Beryllium Copper, 200μ" Tin	.177	.172
8011-8G15	3		Nylon, Black		.177	.172
8011-8G16	3		Nylon, Red		.177	.172
8011-8G17	3		Teflon, Natural		.185	.172

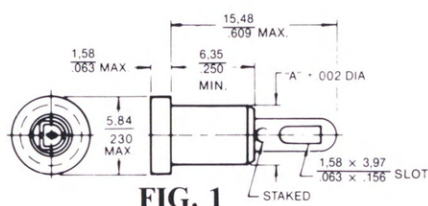


FIG. 1

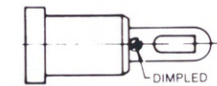


FIG. 1A

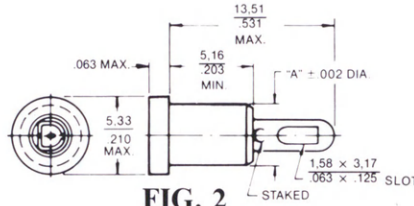


FIG. 2

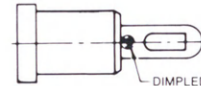


FIG. 2A

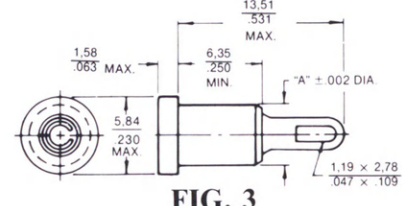


FIG. 3

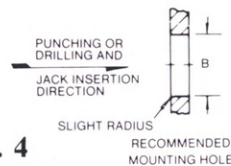


FIG. 4

Dimension Specified in:

MILLIMETER INCH

Tolerance: ± 0.13/.005
Unless otherwise specified

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	10 Milliohms maximum
CURRENT RATING	5 Amps DC
OPERATING VOLTAGE	1500 Volts RMS at sea level 350 Volts RMS at 50K feet
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	2500 Volts RMS at sea level 500 Volts RMS at 50K feet
INSULATION RESISTANCE	5000 × 10 ⁶ ohms
CAPACITANCE	4 pF at 5 MHZ.
OPERATING TEMPERATURE	-65°C to + 125°C

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Chassis Mounted Test Jacks

8040
Series

INTRODUCTION:

The Augat 8040 series test jacks are designed for front panel and internal electronic chassis mounting. Used for signal input, voltage distribution and signal test point identification. The four finger, precision machined Beryllium copper contact design assures a long insertion and withdrawal life.



Mil-C-39024/10

- Qualified to Mil-C-39024/10 with either Gold or Tin/Lead termination
- Designed for .080 inch diameter probes
- Commercial versions in Gold, and Tin platings available
- 10 brilliant-colored nylon plus natural nylon insulators
- Closed entry design protects contacts from damage from oversized probes

PART NUMBER DESIGNATIONS

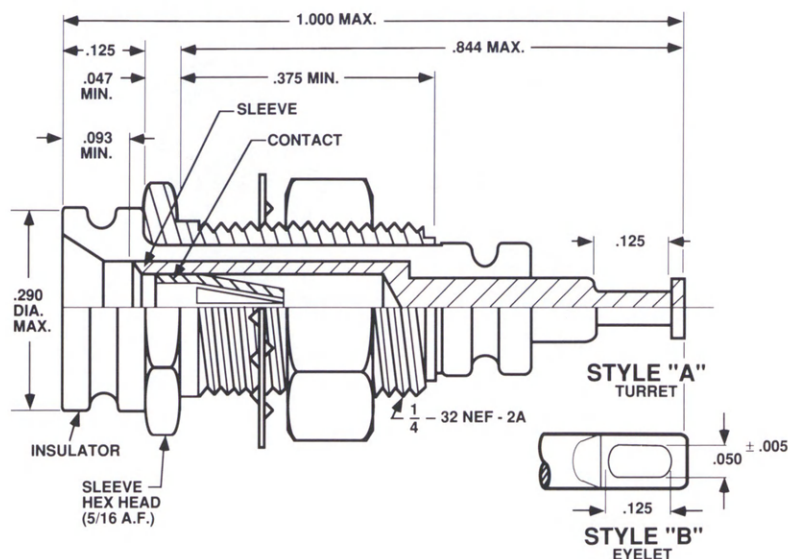
MIL-C-39024/10 PARTS			COMMERCIAL PARTS		
* MIL SPECIFICATION NUMBER	GOLD TERMINATION	TIN/LEAD TERMINATION	AUGAT COMMERCIAL GOLD	AUGAT COMMERCIAL TIN	INSULATOR COLOR
M39024/10-01	M8040-21G9A	M8040-48G9A	8040-41G9A	8040-31G9A	White
M39024/10-02	M8040-21G4A	M8040-48G4A	8040-41G4A	8040-31G4A	Red
M39024/10-03	M8040-21G6A	M8040-48G6A	8040-41G6A	8040-31G6A	Black
M39024/10-04	M8040-21G3A	M8040-48G3A	8040-41G3A	8040-31G3A	Brown
M39024/10-05	M8040-21G7A	M8040-48G7A	8040-41G7A	8040-31G7A	Green
M39024/10-06	M8040-21G5A	M8040-48G5A	8040-41G5A	8040-31G5A	Orange
M39024/10-07	M8040-21G8A	M8040-48G8A	8040-41G8A	8040-31G8A	Marine Blue
M39024/10-08	M8040-21G2A	M8040-48G2A	8040-41G2A	8040-31G2A	Yellow
M39024/10-09	M8040-21G10A	M8040-48G10A	8040-41G10A	8040-31G10A	Gray
M39024/10-10	M8040-21G12A	M8040-48G12A	8040-41G12A	8040-31G12A	Purple
M39024/10-11	M8040-21G9B	M8040-48G9B	8040-41G9B	8040-31G9B	White
M39024/10-12	M8040-21G4B	M8040-48G4B	8040-41G4B	8040-31G4B	Red
M39024/10-13	M8040-21G6B	M8040-48G6B	8040-41G6B	8040-31G6B	Black
M39024/10-14	M8040-21G3B	M8040-48G3B	8040-41G3B	8040-31G3B	Brown
M39024/10-15	M8040-21G7B	M8040-48G7B	8040-41G7B	8040-31G7B	Green
M39024/10-16	M8040-21G5B	M8040-48G5B	8040-41G5B	8040-31G5B	Orange
M39024/10-17	M8040-21G8B	M8040-48G8B	8040-41G8B	8040-31G8B	Marine Blue
M39024/10-18	M8040-21G2B	M8040-48G2B	8040-41G2B	8040-31G2B	Yellow
M39024/10-19	M8040-21G10B	M8040-48G10B	8040-41G10B	8040-31G10B	Gray
M39024/10-20	M8040-21G12B	M8040-48G12B	8040-41G12B	8040-31G12B	Purple
* Note: M39024/10-xxg = Gold Termination M39024/10-xx = Tin/Lead Termination			8040-41G1A	8040-31G1A	Natural
			8040-41G1B	8040-31G1B	Natural



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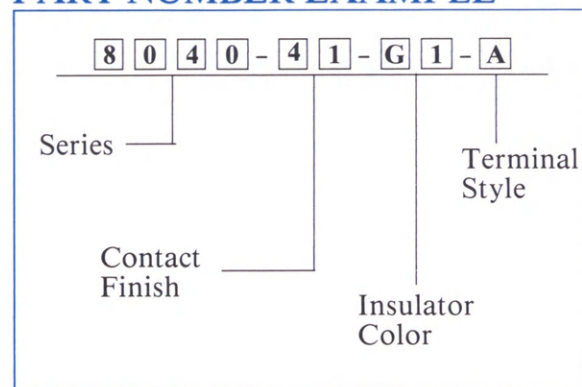
8040 Series

DIMENSIONS



Tolerance unless otherwise specified: $\pm .005$

PART NUMBER EXAMPLE



Mounting Hole:
recommended dia. .266 inch

MATERIAL SPECIFICATIONS

INSULATOR	Nylon, per Mil-M-20693
INNER CONTACT	Beryllium Copper
CONTACT PLATING	(31G) Terminal/Contact: 200 micro inches Tin/Lead over 50 micro inches Nickel
	(41G) Terminal/Contact: 20 micro inches Gold over Nickel
	(21G) Terminal: 20 micro inches Gold
	Contact: 50 micro inches Gold both over Nickel
	(48G) Terminal: 200 micro inches Tin/Lead over Copper
	Contact: 50 micro inches Gold over Nickel
OUTER SLEEVE	Machined Brass, per QQ-B-626
THREADED SLEEVE AND NUT	Machined Brass, plating 200 micro inches Nickel
LOCK WASHER	Phosphor Bronze, plating 200 micro inches Nickel

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	2 Milliohms at 5 Amps	HUMIDITY	1000 x 10 ⁶ Ohms minimum per Mil. Std. 202, Method 101, Condition B
CURRENT RATING	5 Amps DC	VIBRATION	15G's, 10-55 Hz, Mil. Std. 202, Method 201 monitor for 10 micro seconds opening
OPERATING VOLTAGE	2000 Volts RMS at sea level, 350 Volts RMS at 80,000 ft.	MECHANICAL SHOCK	50 G's Mil. Std. 202, Method 202 monitor for 10 micro seconds opening
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	3000 Volts RMS at sea level, 500 Volts RMS at 80,000 ft. per Mil. Std. 202, Method 301	DURABILITY	500 Cycles, using .080 \pm .001 diameter test probe, Mil-C-39024
INSULATION RESISTANCE	5000 x 10 ⁶ Ohms	THERMAL SHOCK	-65°C to +125° C, Mil. Std. 202, Method 107, Condition B
CAPACITANCE (SLEEVE TO CHASSIS)	3pF	INSERTION FORCE	5.0 lb. max. per Mil-C-39024
OPERATING TEMPERATURE	-55 °C to + 125° C	EXTRACTION FORCE	0.4 lb. min. per Mil-C-39024
SALT SPRAY	3 Milliohms at 5 Amps, per Mil. Std. 202, Method 101, Condition B.	SOLDERABILITY	Mil. Std. 202, Method 208
		PERMEABILITY	2.0u max. per Mil-I-17214

NOTE: Military Test Reference applies specifically to Mil-Qualified Components.

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Printed Circuit Test Jacks

8041 Series

The Augat 8041 Series printed wiring board mounting test jacks require very little mounting space. Used in many applications as signal test points, they are also used as electromechanical interfaces from daughter cards to mother boards. Test jack M8041-15G is qualified to Mil-C-39024/11. This series test jack accepts .080 inch dia. test probes in either side or top and side entry models. Commercial version with many plating variations are available.



Mil-C-39024/11

- Dimple on printed circuit terminals, retains test jack in P.W.B. during flow soldering
- Ten brilliant insulation colors available for quick test point reference
- Top entry allows test jack to be probed while being used as an interconnection socket
- Probe stop version prevents probe from shorting to components located behind test jack

PART NUMBER DESIGNATIONS

MILITARY		COMMERCIAL						
MILITARY PART NUMBER	AUGAT PART NO. FIG. 1	40 MICRO INCHES GOLD FIG. 1	TIN PLATED FIG. 1	30 MICRO INCHES GOLD FIG. 1	30 MICRO INCHES GOLD FIG. 2	30 MICRO INCHES GOLD FIG. 3A	30 MICRO INCHES GOLD FIG. 3B	INSULATOR COLOR
M39024/11-01 G	M8041-15G9	8041-1G9	8041-11G9	8041-14G9	8041-12G9	8041-6G9	8041-6G9-3	White
M39024/11-02 G	M8041-15G4	8041-1G4	8041-11G4	8041-14G4	8041-12G4	8041-6G4	8041-6G4-3	Red
M39024/11-03 G	M8041-15G6	8041-1G6	8041-11G6	8041-14G6	8041-12G6	8041-6G6	8041-6G6-3	Black
M39024/11-04 G	M8041-15G3	8041-1G3	8041-11G3	8041-14G3	8041-12G3	8041-6G3	8041-6G3-3	Brown
M39024/11-05 G	M8041-15G7	8041-1G7	8041-11G7	8041-14G7	8041-12G7	8041-6G7	8041-6G7-3	Green
M39024/11-06 G	M8041-15G5	8041-1G5	8041-11G5	8041-14G5	8041-12G5	8041-6G5	8041-6G5-3	Orange
M39024/11-07 G	M8041-15G8	8041-1G8	8041-11G8	8041-14G8	8041-12G8	8041-6G8	8041-6G8-3	Blue
M39024/11-08 G	M8041-15G2	8041-1G2	8041-11G2	8041-14G2	8041-12G2	8041-6G2	8041-6G2-3	Yellow
M39024/11-09 G	M8041-15G10	8041-1G10	8041-11G10	8041-14G10	8041-12G10	8041-6G10	8041-6G10-3	Gray
M39024/11-10 G	M8041-15G11	8041-1G11	8041-11G11	8041-14G11	8041-12G11	8041-6G11	8041-6G11-3	Violet
M39024/11-41 G	M8041-15G9-1	8041-1G9-1	8041-11G9-1	8041-14G9-1	8041-12G9-1	8041-6G9-1		White
M39024/11-42 G	M8041-15G4-1	8041-1G4-1	8041-11G4-1	8041-14G4-1	8041-12G4-1	8041-6G4-1		Red
M39024/11-43 G	M8041-15G6-1	8041-1G6-1	8041-11G6-1	8041-14G6-1	8041-12G6-1	8041-6G6-1		Black
M39024/11-44 G	M8041-15G3-1	8041-1G3-1	8041-11G3-1	8041-14G3-1	8041-12G3-1	8041-6G3-1		Brown
M39024/11-45 G	M8041-15G7-1	8041-1G7-1	8041-11G7-1	8041-14G7-1	8041-12G7-1	8041-6G7-1		Green
M39024/11-46 G	M8041-15G5-1	8041-1G5-1	8041-11G5-1	8041-14G5-1	8041-12G5-1	8041-6G5-1		Orange
M39024/11-47 G	M8041-15G8-1	8041-1G8-1	8041-11G8-1	8041-14G8-1	8041-12G8-1	8041-6G8-1		Blue
M39024/11-48 G	M8041-15G2-1	8041-1G2-1	8041-11G2-1	8041-14G2-1	8041-12G2-1	8041-6G2-1		Yellow
M39024/11-49 G	M8041-15G10-1	8041-1G10-1	8041-11G10-1	8041-14G10-1	8041-12G10-1	8041-6G10-1		Gray
M39024/11-50 G	M8041-15G11-1	8041-1G11-1	8041-11G11-1	8041-14G11-1	8041-12G11-1	8041-6G11-1		Violet
	8041-15G1	8041-1G1	8041-11G1	8041-14G1	8041-12G1	8041-6G1		Natural
	8041-15G1-1	8041-1G1-1	8041-11G1	8041-14G1-1	8041-12G1-1	8041-6G1-1		Natural

NOTE: Suffix (-1) indicates top entry hole.



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8041 Series

DIMENSIONS

FIG. 1

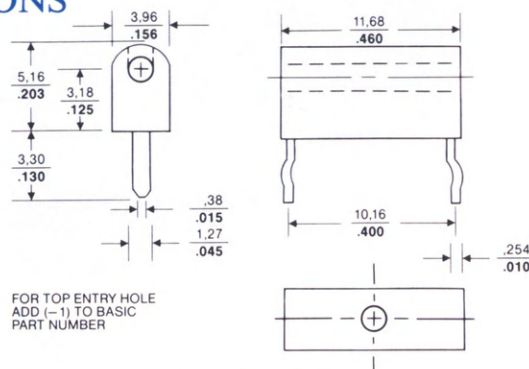


FIG. 2

DAP FOR RETENTION
IN 1.32/.052 DIA.
MOUNTING HOLE

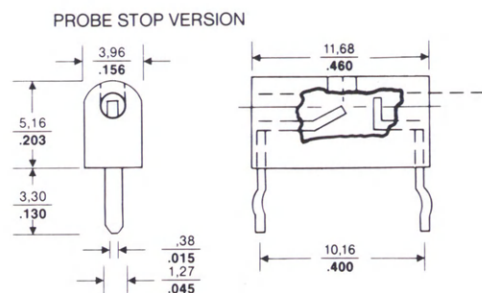
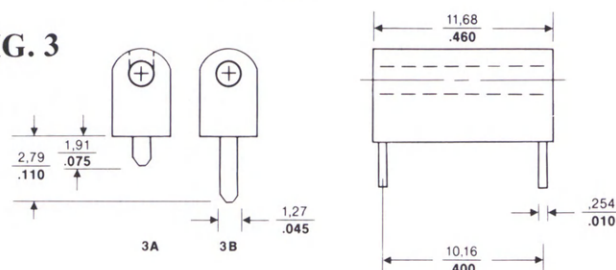


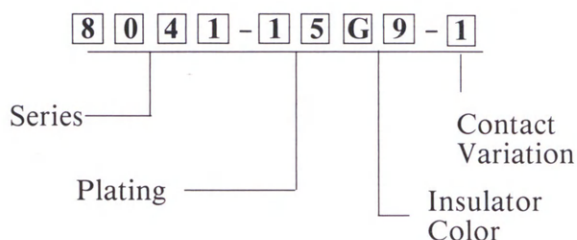
FIG. 3



INSULATOR COLOR CODES

G1 Natural	G5 Orange	G9 White
G2 Yellow	G6 Black	G10 Gray
G3 Brown	G7 Green	G11 Violet
G4 Red	G8 Blue	

PART NUMBER EXAMPLE



MATERIAL SPECIFICATIONS

Insulator	Nylon, Mil-M-20693, UL 94-V2
Contacts	Beryllium Copper
Platings ... (-1)	40 micro-inches Gold over Nickel
(-6)	30 micro-inches Gold over Silver
(-11)	200 micro-inches ElectroTin, Mil-T-10727
(-12)	30 micro-inches Gold over Silver
(-14)	30 micro-inches Gold over Copper
(-15)	50 micro-inches Gold over 200 micro-inches Nickel, Mil-G-45204

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	4 Milliohms at 5 amps, military; 5 milliohms at 5 amps, commercial
CURRENT RATING	5 Amps DC
OPERATING VOLTAGE	1500 Volts RMS at sea level, 350 volts RMS at 50,000 feet
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	2500 Volts RMS at sea level, 500 volts RMS at 50,000 feet, Mil. Std. 202, Method 301
INSULATION RESISTANCE	5000 $\times 10^6$ Ohms, Mil-C-39024 Section 4.6.5.
CAPACITANCE	1 Pico Farad at 5 MHZ
OPERATING TEMPERATURE	-65 °C to +125 °C
SALT SPRAY	4 Milliohms at 5 amps, Mil. Std. 202, Method 101
HUMIDITY	1000 $\times 10^6$ Ohms, Mil. Std. 202, Method 103
VIBRATION	15G's, O-55 Hz, monitored for 10 micro seconds opening, Mil. Std. 202, Method 201
MECHANICAL SHOCK	50G's, Monitored for 10 micro seconds opening, Mil. Std. 202, Method 202
DURABILITY	500 Insertions
THERMAL SHOCK	-65° C to +125° C, Mil. Std. 202, Method 107
INSERTION FORCE .....	.080 dia. pin., 5.0 lb. max.
WITHDRAWAL FORCE080 dia. pin., 8 oz. min.
PERMEABILITY	2.0 Mu max. Mil-I-17214
SOLDERABILITY	Mil. Std. 202, Method 208

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NOTE: Military Test Reference applies specifically to Mil-Qualified Components.

Micro-Miniature PC Test Jacks

8046
Series

The Augat 8046 Series Micro-miniature PC board mounting test jack uses the absolute minimum amount of PC board space. It can be used both as a test jack and an electromechanical interface for mother and daughter boards. The 8046-6G Series is qualified to Mil39024/18. This series test jack accommodates .080" diameter probes or interface pins. Commercial versions are available with many plating variations.

- Low profile for close board-to-board spacing
- Can be mounted in a row on .200" centers



Mil39024/18C

- Ten brilliant insulation colors available for quick test point reference
- Low cost and high reliability

PART NUMBER DESIGNATIONS

MILITARY		COMMERCIAL			
MILITARY PART NUMBERS	AUGAT PART NO. FIGURE 1	AUGAT PART NO. FIGURE 1	AUGAT PART NO. FIGURE 2	AUGAT PART NO. FIGURE 1	INSULATOR COLOR CODE
	8046-6G1	8046-1	8046-5	8046-7G1	NATURAL
M39024/18-02	M8046-6G2	8046-1G2	8046-5G2	8046-7G2	YELLOW
M39024/18-03	M8046-6G3	8046-1G3	8046-5G3	8046-7G3	BROWN
M39024/18-04	M8046-6G4	8046-1G4	8046-5G4	8046-7G4	RED
M39024/18-05	M8046-6G5	8046-1G5	8046-5G5	8046-7G5	ORANGE
M39024/18-06	M8046-6G6	8046-1G6	8046-5G6	8046-7G6	BLACK
M39024/18-07	M8046-6G7	8046-1G7	8046-5G7	8046-7G7	GREEN
M39024/18-08	M8046-6G8	8046-1G8	8046-5G8	8046-7G8	BLUE
M39024/18-09	M8046-6G9	8046-1G9	8046-5G9	8046-7G9	GRAY
M39024/18-10	M8046-6G10	8046-1G10	8046-5G10	8046-7G10	VIOLET
M39024/18-01	M8046-6G11	8046-1G11	8046-5G11	8046-7G11	WHITE

MATERIAL SPECIFICATIONS

INSULATOR ... Teflon, Mil-I-22129

CONTACT Phosphor Bronze,
QQ-B-750

PLATING ... 8046-1 Series—30μ" Gold Over Nickel

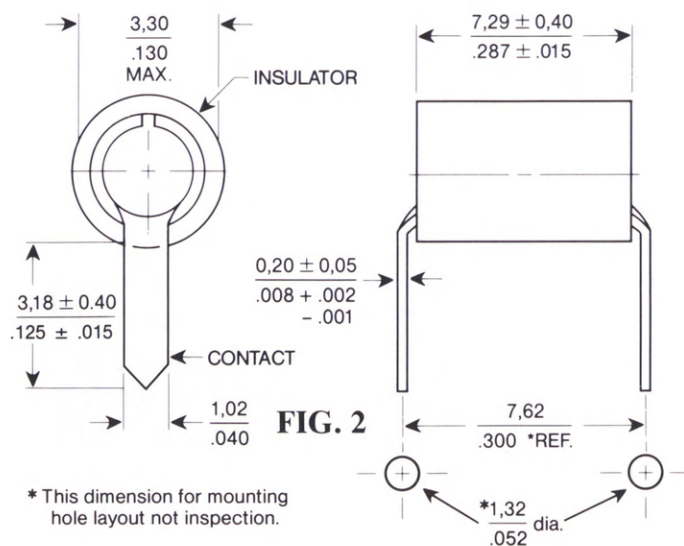
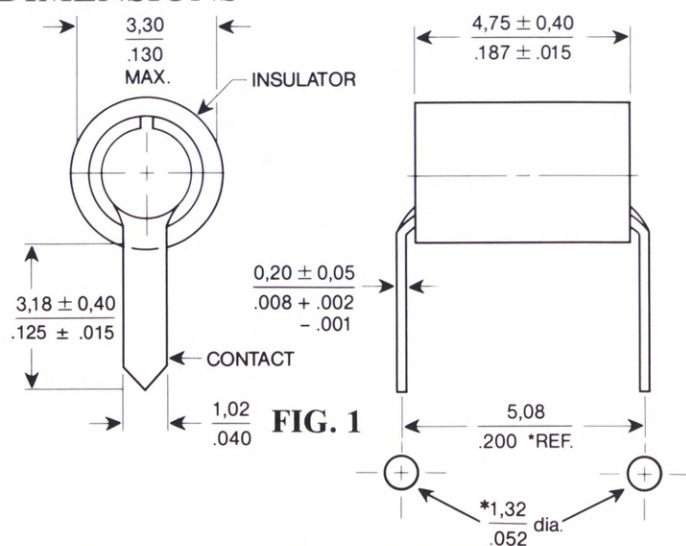
8046-5 Series—30μ" Gold Over Nickel

8046-6 Series—50μ" Gold Over Nickel per Mil-G-45204

8046-7 Series—200μ" Tin Over Copper per Mil-T-10727

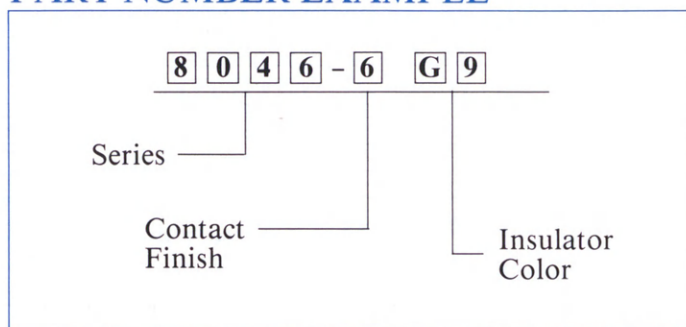
8046 Series

DIMENSIONS



* This dimension for mounting hole layout not inspection.

PART NUMBER EXAMPLE



Dimensions Specified In:	
Millimeter	Millimeter/Inch
Inch	
Tolerance: $\pm 0.13/0.005$	
Unless Otherwise Specified	

NOTE:
Military test references apply specifically to Mil Qualified components.

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	4 Milliohms at 5 Amps, military; 5 Milliohms at 5 Amps commercial
CURRENT RATING	-5 Amps DC
OPERATING VOLTAGE	+ 1000 Volts RMS at sea level, 350 Volts RMS at 50,000 feet, Mil. Std. 202
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	1500 Volts RMS at sea level, 500 Volts RMS at 50,000 feet, Mil-C-39024, test 2 for 15 Seconds
INSULATION RESISTANCE	5000 $\times 10^6$ Ohms
CAPACITANCE	1pF
OPERATING TEMPERATURE	-65°C to + 150°C
SALT SPRAY	4 Milliohms at 5 Amps, Mil. Std. 202, Method 101
HUMIDITY	1000 $\times 10^6$ Ohms, Mil. Std. 202, Method 103
VIBRATION	15 G's at 10 to 2 KHz per Mil. Std. 202, Method 204
MECHANICAL SHOCK	100 G's per Mil. Std. 202, Method 213
DURABILITY	150 Insertion and withdrawal cycles
THERMAL SHOCK	-65°C to +200°C, Mil. Std. 202, Method 107
INSERTION FORCE	10 Lbs. max.
WITHDRAWAL FORCE5 Lbs. min.
SOLDERABILITY	Mil. Std. 202, Method 208

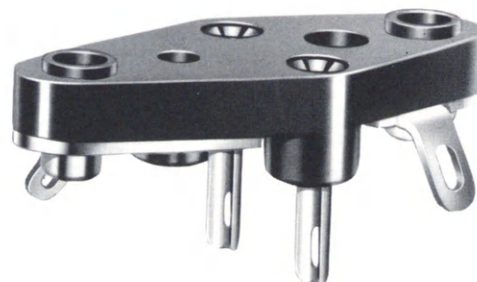
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TO-3 Power Transistor Socket

8080-1G
Series



The 8080-1G family of TO-3 Power Transistor Sockets is used for both small and large signal devices. "M" versions are qualified to Mil-12883/42. Used in power supplies, power amplifiers, sweep amplifiers, and machine control equipment. These sockets are designed to constantly perform.

- Contact rating 10 amps. 20 amps for 8080-1G44 VDE style.
- Sockets accept components with 1,02/.040 + 0,08/.003-0,05/.002 diameter leads; 1,52/.060+ 0,08/.003-0,05/.002 diameter leads
- Integral mounting saddle has 20 inch pounds min. thread strength

- Mounting saddles Tin (standard) or Silver plated
- Metric and standard thread mounting
- VDE style socket for higher current and isolation
- Diallyl phthalate and phenolic insulators
Contacts: Beryllium Copper; Tin, Silver or Gold plated
- "M" versions manufactured to Mil-12883/42

MILITARY COMPONENTS

MILITARY NUMBER	AUGAT NUMBER	LEAD DIAMETER	INSULATOR	CONTACT PLATING	SOLDER TABS	FIG.
M12883/42-01	M8080-1G40	1,02 .040	Diallyl Phthalate	50μ" Gold	One Lug	4A
M12883/42-02	M8080-1G41			Electro-Tin		
M12883/42-03	M8080-1G42			50μ" Gold	Two Lugs	
M12883/42-04	M8080-1G43			Electro-Tin		

COMMERCIAL COMPONENTS

.040 DIAMETER PIN					
PART NUMBER	INSULATOR	CONTACT PLATING	SOLDER LUGS	FIG. NO.	
8080-1G1	Phenolic	Electro-Tin	Two Solder Lugs	4	
8080-1G45				5	
8080-1G13	Dil Phth*	Silver		4	
8080-1G27	Phenolic				
8080-1G2	Dil Phth*	30 Micro-inch Gold			
8080-1G7	Phenolic				
8080-1G10	Dil Phth*	50 Micro-inch Gold			
8080-1G28	Phenolic				
8080-1G19	Dil Phth*	Electro-Tin		One Solder Lug	4
8080-1G3	Phenolic				
8080-1G24	Dil Phth*	Silver			
8080-1G29	Phenolic				
8080-1G4	Dil Phth*	30 Micro-inch Gold			
8080-1G9	Phenolic				
8080-1G25	Dil Phth*	50 Micro-inch Gold			
8080-1G30	Phenolic				
8080-1G18	Dil Phth*	Tin/Gold	P.C. Mount	7	
8080-1G44	Phenolic				

*Diallyl Phthalate

.060 DIAMETER PIN				
PART NUMBER	INSULA-TOR	CONTACT PLATING	SOLDER LUGS	FIG. NO.
8080-1G15	Phenolic	Electro-Tin	Two Solder Lugs	4
8080-1G17				5
8080-1G31	Dil Phth*	Silver		4
8080-1G32	Phenolic			
8080-1G16	Dil Phth*			
8080-1G33	Phenolic	30 Micro-inch Gold		
8080-1G34	Dil Phth*			
8080-1G14	Phenolic	Electro-Tin		
8080-1G35	Dil Phth*			
8080-1G36	Phenolic	Silver	One Solder Lug	
8080-1G37	Dil Phth*			
8080-1G38	Phenolic	30 Micro-inch Gold		
8080-1G39	Dil Phth*			

Special options available, 4-40 NC mounting threads, 3/8X.75MM MOUNTING THREADS, Silver plated mounting saddles. Consult factory for availability.

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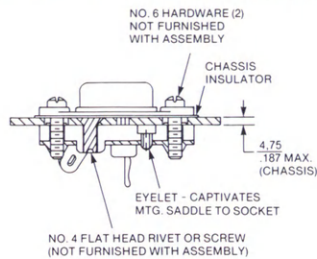
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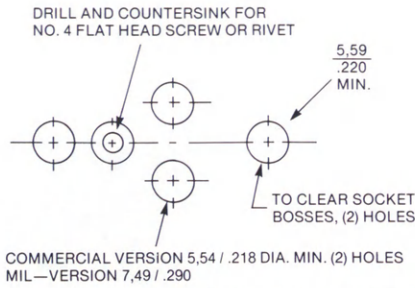
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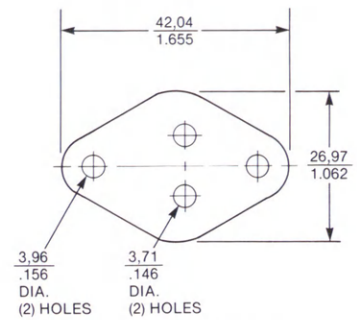
8080-1G Series



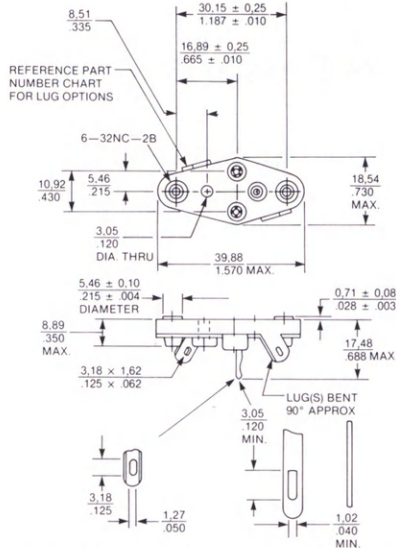
ASSEMBLY ILLUSTRATION
Fig. 1



RECOMMENDED CHASSIS CUTOUT STANDARD AND MILITARY STYLES
Fig. 2

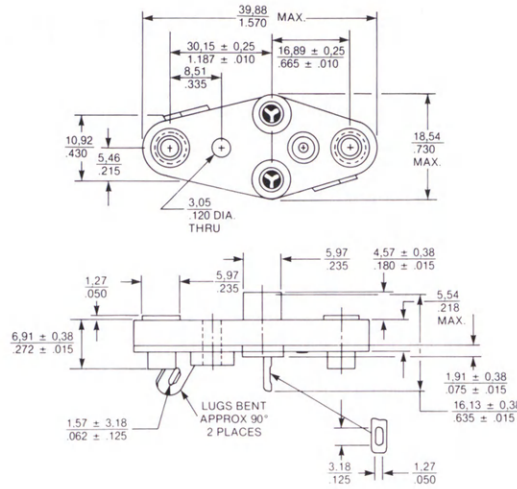


CHASSIS INSULATOR
P/N 8038-3P1
Fig. 3

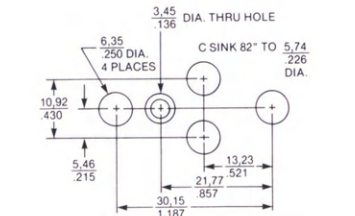


OUTLINE DRAWING FOR STANDARD AND MILITARY VERSIONS
Fig. 4

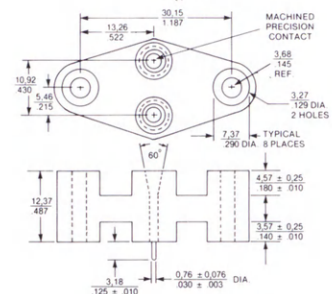
TERMINAL USED ON MIL-S-12883/42 VERSIONS
Fig. 4A



8080-1G17, 8080-1G45
Fig. 5



RECOMMENDED CHASSIS CUTOUT 8080-1G17, 8080-1G45
Fig. 6



VDE STYLE SOCKET
Fig. 7

MATERIAL SPECIFICATIONS

INSULATOR Black phenolic, CFG per Mil-M-14, Green diallyl phthalate, SDG-F, flame resistant, Mil-M-14F, UL-94V-0

MOUNTING SADDLE ... Brass, QQ-B-626, heat treated. For metric thread 3 × .5mm add suffix (M3) to basic part number

SADDLE PLATING Electro-Tin standard
Silver—special order, consult factory

INSULATING WASHER Mica 0.08 / .003 thick
Ordered separately—part number 8038-3P1, Fig. 3

CONTACTS Beryllium Copper, alloy 172, QQ-C-553

CONTACT PLATING 200μ" Tin, per Mil-T-10727
500μ" Silver, QQ-S-365
30μ" Standard gold, Mil-G-45204
50μ" Military gold, Mil-G-45204, over Nickel, per QQ-N-290

PERFORMANCE CHARACTERISTICS

BULK RESISTANCE Gold 15 Milliohms, per Mil-S-12883, Tin 25 Milliohms max. Silver 25 Milliohms max

CURRENT RATING 10 Amps DC. 10° C rise above ambient, tested with Copper pin. 30° C rise above ambient, tested with Kovar pin

OPERATING TEMP Phenolic -55° C to + 125° C. Diallyl phthalate -55° C to + 150° C

VIBRATION 10-2000 Hz, Mil. Std. 202, Method 204, Condition B, Transistor installed

DURABILITY 50 Insertions per Mil-S-12883

INSULATION RESISTANCE 1000 Megohms per Mil. Std. 202C

DIELECTRIC WITHSTANDING VOLTAGE (DWV) 1500 volts Rms at atmospheric (30 inches in mercury). 500 volts Rms at 50,000 ft. (.09 inches in mercury)

INSERTION FORCE 6 pounds max., per Mil-S-12883

WITHDRAWAL FORCE018 pounds min., 6 pounds max., per Mil-S-12883

THREAD STRENGTH 20 inch pounds minimum

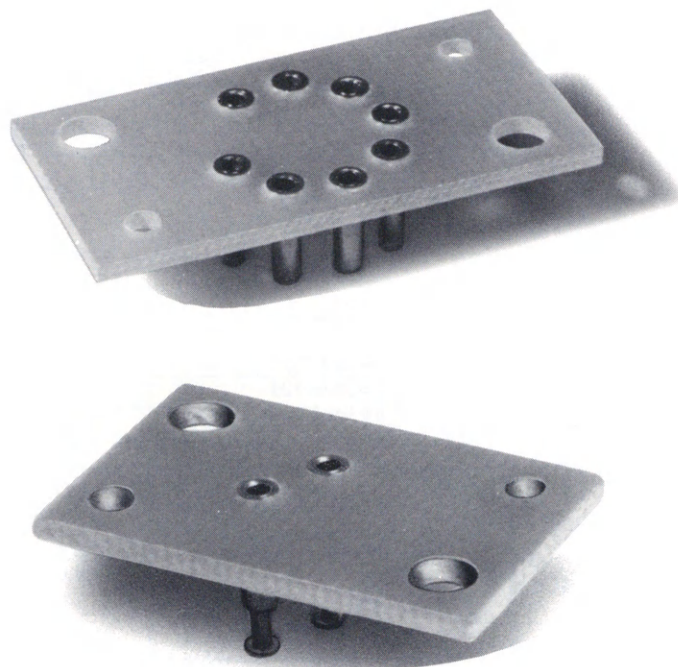
MECHANICAL SHOCK Per Mil-S-12883, with transistor inserted as test gage

To-3 and To-66 Sockets With Glass Epoxy Insulators

8112-AG
Series

The 8112-AG Series of TO-3 power transistor sockets are used to socket 4 and 8 pin high current regulators, which are used in regular and switching power supplies. constructed on glass epoxy, the precision beryllium copper four-finger inner contact and brass outer sleeve assure high performance reliability.

- Used to socket 4 and 8 pin high current regulators
- 15 AMP contact rating
- Closed sleeve design eliminates solder and flux wicking
- Printed circuit board or discrete wire terminal designs
- Accepts .040 inch \pm .003 diameter leads



PART NUMBER DESIGNATION

PART NUMBER	TO PACKAGE	PIN COUNT	FIGURE NUMBER †		
8112-AG1*	TO-66	2	4	7	8
8112-AG2°	TO-66	2	3	6	8
8112-AG3°	TO-66	2	4		9
8112-AG5	TO-3	4			

PART NUMBER	TO PACKAGE	PIN COUNT	FIGURE NUMBER †		
8112-AG6	TO-3	8	4	7	8
8112-AG7	TO-3	4	3	6	8
8112-AG8	TO-3	8	4		9

* Supplied with mica insulator 8112-3P1 ° Supplied with Aluminum Isolator 9046-1P2

† Figure Code: First column: Socket outline dimensions. Second column: Chassis cutout dimensions. Third column: Socket terminal style.

MATERIAL SPECIFICATIONS

INSULATOR 1/16-inch FR4 glass epoxy, per Mil-P-18177
 CONTACT Beryllium Copper, QQ-C-530, heat treated
 CONTACT PLATING .. 30μ inches Gold per Mil-G-45204, Type 1, Grade C over 50μ" Nickel, QQ-N-290
 SLEEVE Brass, per QQ-B-626
 SLEEVE PLATING 30μ inches Gold per Mil-G-45204, Type 1, Grade C over 50μ" Nickel per QQ-N-290

8112-AG Series

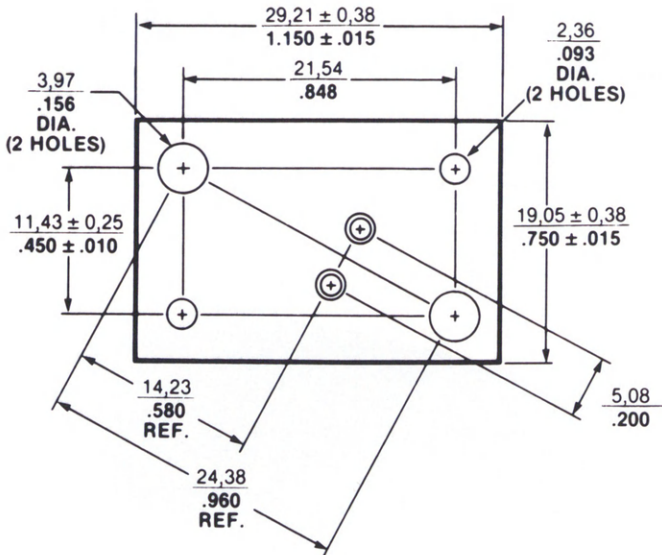


FIG. 1

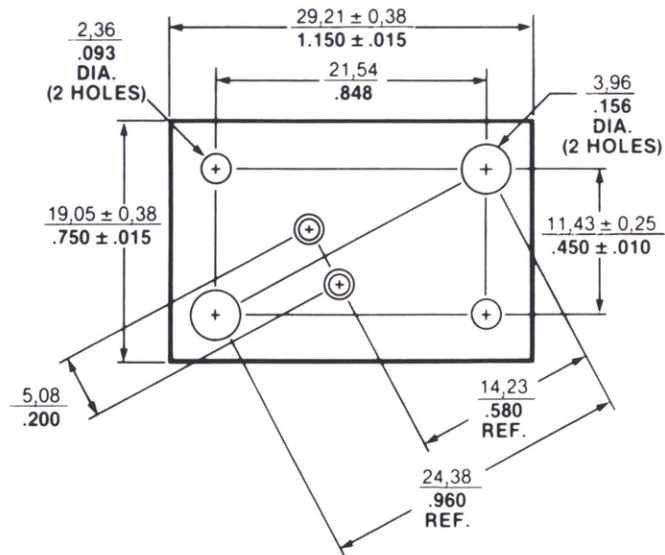


FIG. 2

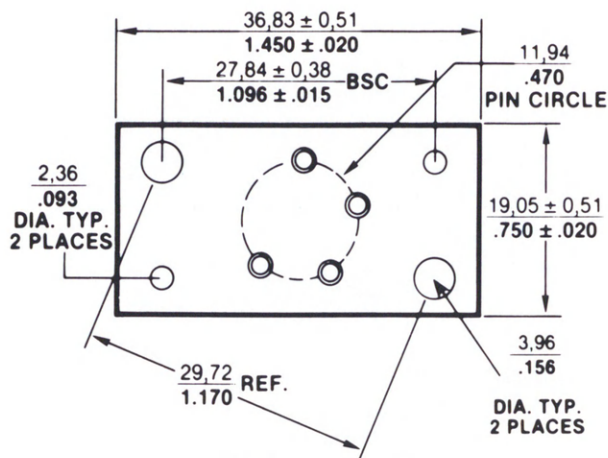


FIG. 3

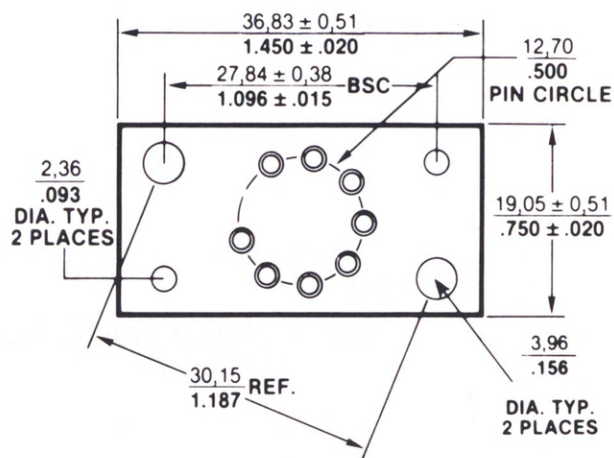


FIG. 4

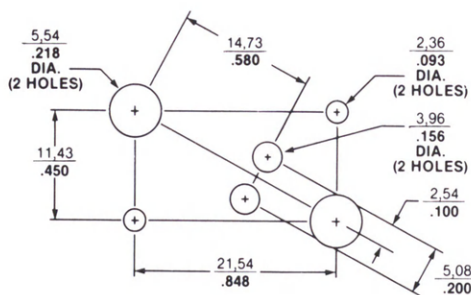


FIG. 5
RECOMMENDED CHASSIS, CUT OUT
FIG. 5A
MIRROR IMAGE, SAME DIMENSION

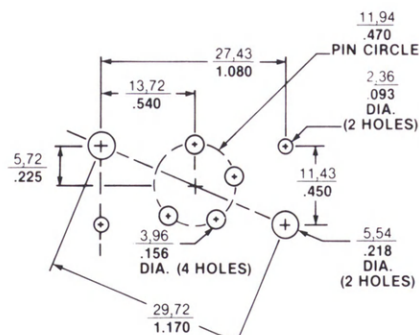


FIG. 6
RECOMMENDED CHASSIS, CUT OUT

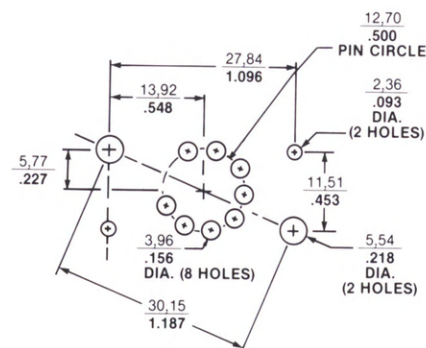
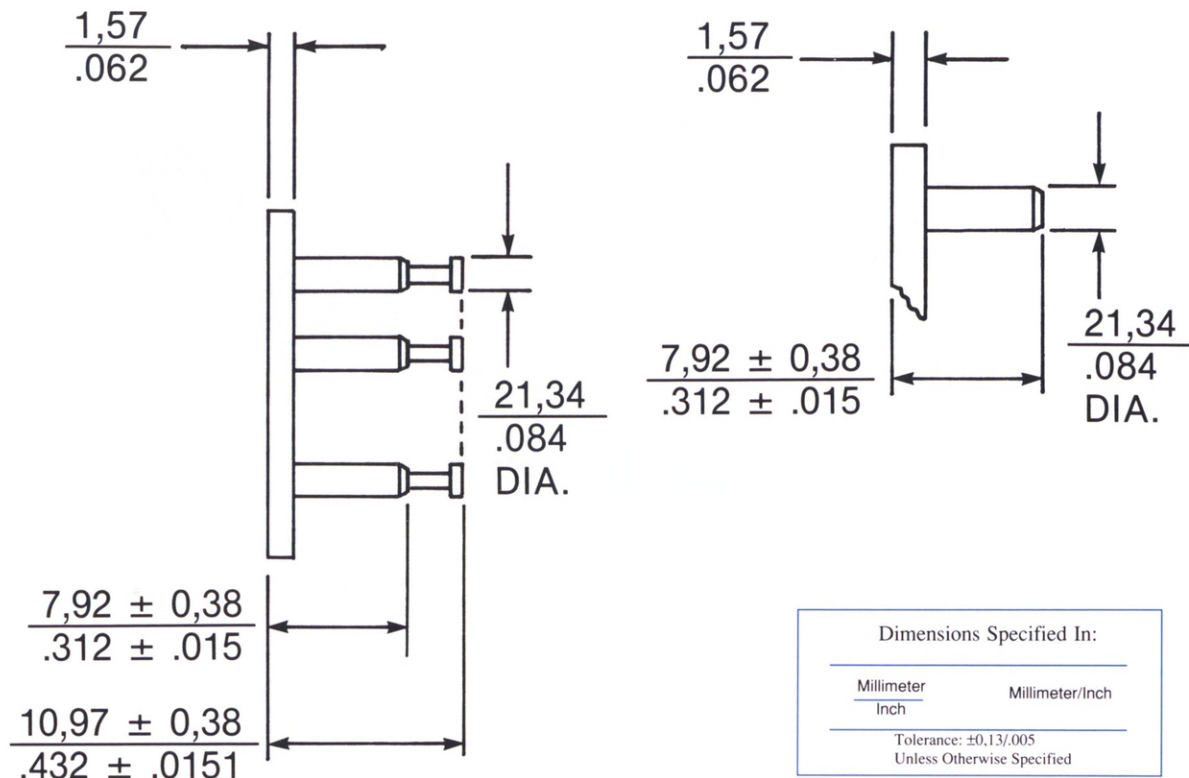


FIG.7
RECOMMENDED CHASSIS, CUT OUT

8112-AG Series



PERFORMANCE CHARACTERISTICS

CURRENT RATING	15 Milliohms max., per Mil-S-12883
BULK CONTACT RESISTANCE	15 AMOS DC, 30 ° C above ambient when tested with a Copper pin
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	1000 Volts RMS at atmospheric pressured; 30-inches mercury. 500 volts RMS at 50,000 ft. (0.9 inches mercury)
INSULATION RESISTANCE	1000 Megohms, per Mil. Std. 202C
OPERATING TEMPERATURE	-55°C to + 125 ° C
INSERTION FORCE	2.5 lb. per contact max., per Mil-S-12883
VIBRATION	10-2000 Hz, Mil. Std. 202, Method 204, Condition B with transistor installed
SHOCK	10G's per Mil-S-12883, with transistor installed
DURABILITY	50 insertions, per Mil-S-12883
SOLDERABILITY	Mil. Std. 202, Method 208

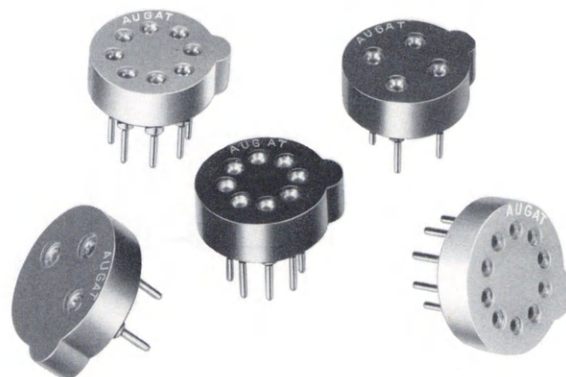
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Transistor and IC Socket-Low Profile

8059
Series

Series 8059 TO-5 transistor sockets are fully qualified to Mil-S-83502/1 and are manufactured with precision machined inner contact of Beryllium Copper and outer Brass sleeve. Insulators are molded in five brilliant Polyamide colors, for rapid visual identification of socket pin count or pin circle. This inexpensive family of transistor sockets is available with either Gold or Tin sleeves for even more economy.

- Military qualified Mil-S-83502/1
- Ultra low profile
- Two-piece socket terminal—four leaf machined inner contact and machined outer sleeve
- Closed entry design—no distortion or damage to contact with misaligned or oversized lead
- Gold plated contacts, choice of Gold or Tin plated leads
- Sockets accept 0,41/.016 to 0,51/.020 diameter leads



Mil-S-83502/1
8059 Series

- Five brilliant colors for easy identification when mounted on PWB
- Closed end sleeve design completely eliminates the possibility of flux or solder wicking into the contact area
- Large tapered entry for easy insertion of transistor devices

PART NUMBER DESIGNATION

MILITARY PART NO.	AUGAT PART NO.	FIG.	NO. CONTACTS	PIN CIRCLE	CONTACT PLATING	SLEEVE PLATING	SLEEVE PLATING THICKNESS	INSULATOR COLOR	
	8059-4G1	1	3	<u>5,02</u> .200	Gold	Gold	20 micro inches	RED	
M83502/1-002	M8059-2G1	2			Gold	Gold	20 micro inches		
M83502/1-021	M8059-2G2				Gold	Tin	200 micro inches		
	8059-4G4	1	4		Gold	Gold	20 micro inches	BLUE	
M83502/1-005	M8059-2G3	2			Gold	Gold	20 micro inches		
M83502/1-024	M8059-2G4				Gold	Tin	200 micro inches		
M83502/1-011	M8059-2G5	3	8		<u>5,84</u> .230	Gold	Gold	20 micro inches	GREEN
M83502/1-030	M8059-2G6					Gold	Tin	200 micro inches	
M83502/1-014	M8059-2G7	4				Gold	Gold	20 micro inches	ORANGE
M83502/1-33	M8059-2G8			Gold		Tin	200 micro inches		
M83502/1-017	M8059-2G9	5	10	Gold		Gold	20 micro inches	YELLOW	
M83502/1-036	M8059-2G10			Gold		Tin	200 micro inches		

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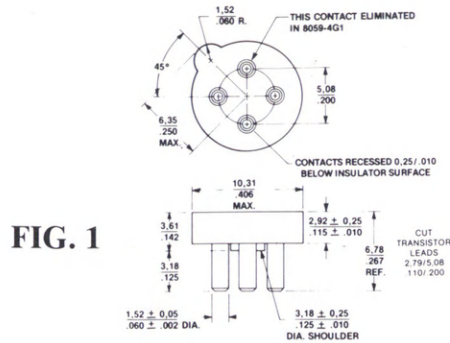


FIG. 1

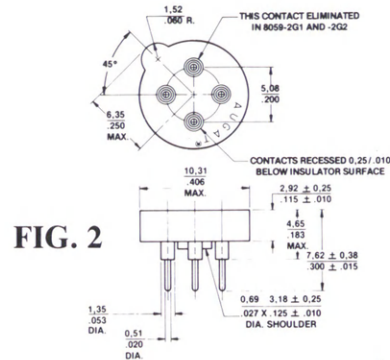


FIG. 2

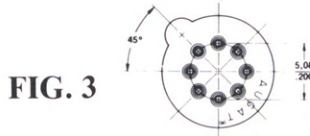


FIG. 3

FIG. 4

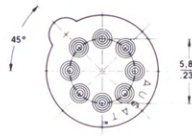
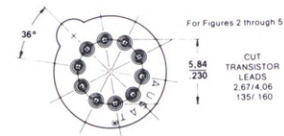
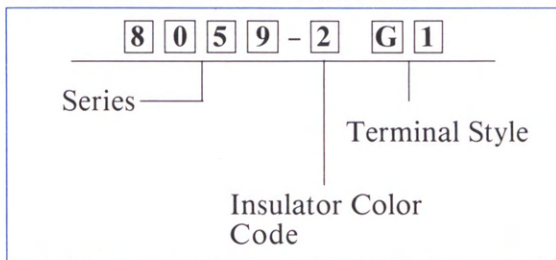


FIG. 5



PART NUMBER EXAMPLE



MATERIAL SPECIFICATIONS

INSULATOR . Glass filled Polyamide Nylon, UL rated 94V-0
 SLEEVE Brass per QQ-B-626
 CONTACT ... Beryllium Copper per QQ-C-530
 PLATING Contact Beryllium Copper per QQ-C-530
 SLEEVE Tin 200 micro-inches
 Gold Refer to part number designation

PERFORMANCE CHARACTERISTICS

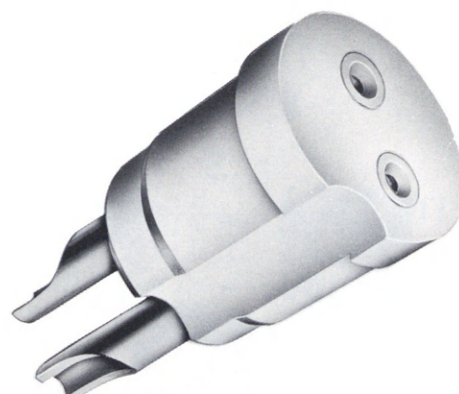
BULK CONTACT RESISTANCE	20 Milliohms max per M83502/1
CURRENT RATING	3 Amp DC
OPERATING VOLTAGE	750 VDC
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	600V AC per Mil. Std. 1344, Method 3001
INSULATION RESISTANCE.....	2 x 10 ⁶ Megohms, Method 3003 of Mil. Std. 1344
CAPACITANCE	2 Pico Farads max, Method 305 of Mil. Std. 202
OPERATING TEMPERATURE	-55° C to + 125° C
CORROSIVE ATMOSPHERE	30 Milliohms, ammonium polysulfide 10 Ppm per M383502/1 sec. 4.7.17
MOISTURED RESISTANCE	30 Milliohms max, Method 2005 of Mil. Std. 202
VIBRATION	15G's, 10 to 2K cycles, Method 2004 of Mil. Std. 1344
MECHANICAL SHOCK	10G's, 1 to 9K cycles, Method 2004 of Mil. Std. 1344
DURABILITY	50 Insertions and withdrawals, M835021, sec. 4.7.12
THERMAL SHOCK	Method 1003 of Mil. Std. 1344
INSERTION FORCE	4.0 lb max. .020 dia. + .0000 probe -.0002
WITHDRAWAL FORCE	1/2 oz min., .016 dia +.0002 probe -.0001
SOLDERABILITY	Method 208 of Mil. Std. 202

Lamp Sockets

8060 Series

The high reliability machined contact and machined sleeve, Teflon, 8060 family of L.E.D. sockets offer the ability to socket on a lead L.E.D. lamp. Available with solder pocket, turret or printed circuit terminals for convenient packaging. These sockets eliminate the need to unsolder a device when service is required, yet will stand up to many severe environments.

- Fast "Push-fit" mounting assures low installation cost



- Contact reliability achieved through smooth wiping leaf contact
- Low Contact resistance

PART NUMBER DESIGNATIONS

PART NUMBER	FIG.	ACCEPT LEAD DIA.	CUT COMPONENT LEAD LENGTH	"A"
8060-1G23	1	$\frac{0,41-0,51}{.016-.020}$	$\frac{3,18}{.125}$ min.	$\frac{2,77}{.109}$
8060-1G25				$\frac{7,62}{.300}$
8060-1G34	2			—
8060-1G16	3	$\frac{0,63}{.025}$		—
8060-1G20	4	$\frac{0,41-0,51}{.016-.020}$		$\frac{8,05}{.317}$

MATERIAL SPECIFICATIONS

INSULATOR Teflon per Mil-P-19468

CONTACT Beryllium Copper per QQ-C-530

Finish: Gold .000030 min. thk. per Mil-G-45204 over Nickel .0001 per QQ-N-290

TERMINAL SLEEVE ... Brass per QQ-B-626

Finish: Gold .000050 min. thk. per Mil-G-45204 over Nickel .000050 per QQ-N-290

Tin .0002 min. thk. per Mil-T-10727 over Copper .000100 min. thk.

FIGURES:

FIG. 1

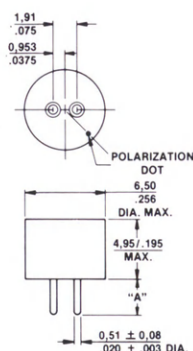
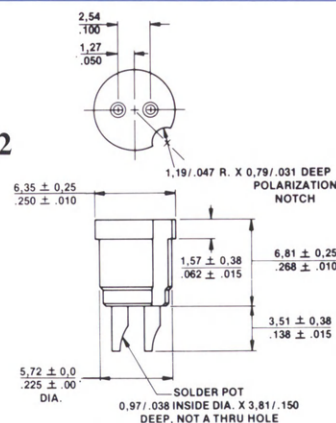


FIG. 2



*Recommended mtg. hole $5,61 \pm 0,03/.221 \pm .001$ —break leading edge $0,38/.015 \times 82^\circ$ countersink.



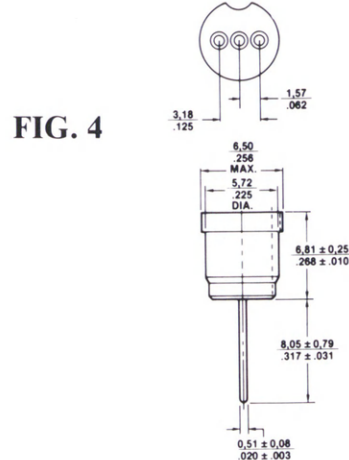
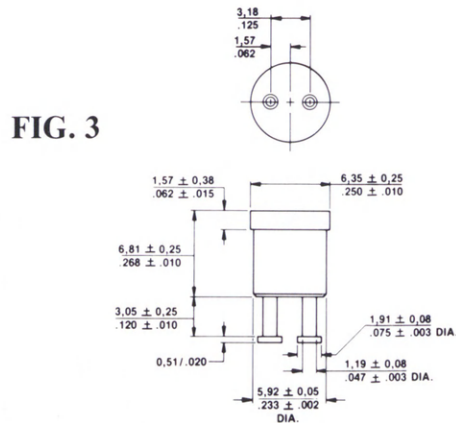
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FIGURES: (Cont.)



PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	20 Milliohms max per M83502/1
CURRENT RATING	3 Amp DC
OPERATING VOLTAGE	750 VDC
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	600V AC per Mil. Std. 1344, Method 3001
INSULATION RESISTANCE.....	2 x 10 ⁶ Megohms, Method 3003 of Mil. Std. 1344
CAPACITANCE	2 Pico Farads max, Method 305 of Mil. Std. 202
OPERATING TEMPERATURE	-55° C to + 125° C
CORROSIVE ATMOSPHERE	30 Milliohms, ammonium polysulfide 10 Ppm per M83502/1 sec. 4.7.17
MOISTURE RESISTANCE	30 Milliohms max, Method 106 of Mil. Std. 202
VIBRATION	15G's, 10 to 2K cycles, Method 2005 of Mil. Std. 1344
MECHANICAL SHOCK	10G's, 1 to 9K cycles, Method 2004 of Mil. Std. 1344
DURABILITY	50 Insertions and withdrawals, M83502/1, sec. 4.7.12
THERMAL SHOCK	Method 1003 of Mil. Std. 1344
INSERTION FORCE	4.0 lb max., .020 dia. + .0000 probe -.0002
WITHDRAWAL FORCE	1/2 oz. min., .016 dia., + .0002 probe -.0001
SOLDERABILITY	Method 208 of Mil. Std. 202

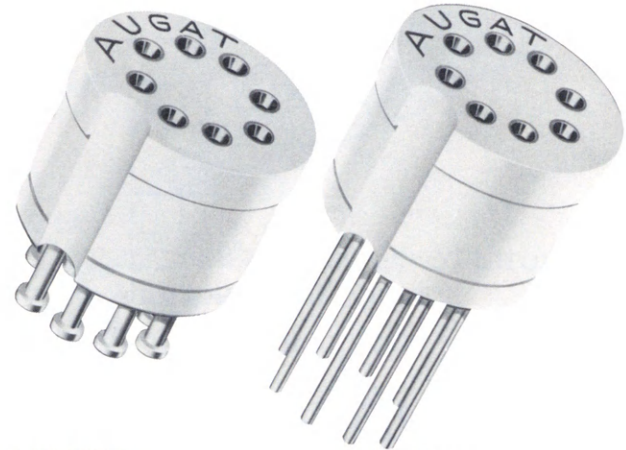
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Transistor Sockets

8058 & 8060 SERIES

The 8058/8060 family of Teflon sockets, with Beryllium copper contacts, offers many features which allow them to be utilized in the most severe applications. Low profile for close board spacing, closed sleeve to 100% prevent solder and flux wicking. A choice of many terminal styles for greater packaging selection and ease of use. Many of these sockets meet or exceed Mil-83502/1 and Mil-83502/6.

- Two-piece socket terminal — four-leaf machined inner contact and machined outer sleeve
- Low profile for tight space applications
- Sockets accept 0.41/.016 to 0.51/.020 diameter leads
- Printed circuit, solder pocket and turret style termination available
- Closed entry design — no distortion or damage to contact with misaligned or oversized lead



**M8058-1G19
M8053-1G32
8058-39G5 or G3**

8058-1G47

All part numbers prefixed with (M) meet Mil-83502/1 or Mil-83502/6.

PART NUMBER DESIGNATIONS

PART NO.	FIG.	NO. OF CON-TACTS	PIN CIRCLE	A DIM. REF.	B DIM. REF.	E DIM. ±.031	F DIM. MAX.	TERMINAL STYLE	MTG. HOLE FIG.	TRAN-SISTOR LEAD LENGTH FIG.	POLARI-ZATION FIG.
8060-1G5	3	3	.100	.100	.265	.146	.350	SOLDER POCKET	A	D	N
8060-1G17	3	3	.100	.100	.320	.084	.264				N
8060-1G6	3	4	.100	.100	.265	.146	.350				N
8060-1G18	3	4	.100	.100	.265	.146	.240				N
8060-1G9	2	3	.100	.100	.265	.094	.310	TURRET	A		N
8060-1G10	2	4	.100	.100	.265	.094	.310				N
8060-1G11	4	3	.100	.100	.340	.230	.515	PRINTED CIRCUIT	—		N
8060-1G24	4	3	.100	.100	.340	1.685	1.960				N
8060-1G12	4	4	.100	.100	.340	.230	.515				N
8060-1G7	5	3	.100	.200	.390	.187	.530				N
8060-1G37	5	3	.100	.200	.390	.565	.900				N
8060-19G1	5	3	.100	.100	.275	.700	.900				N
8060-1G8	5	4	.100	.200	.390	.187	.530			N	
8060-1G3	6	3	.100	.150	.195	.115			—	E	P
8060-1G13	6	3	.100	.100	.195	.115					P
8060-1G4	6	4	.100	.150	.195	.115					P
8060-1G22	6	4	.100	.100	.195	.295					P

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8058 & 8060 Series

PART NO.	FIG.	NO. OF CON- TACTS	PIN CIRCLE	A DIM. REF.	B DIM. REF.	E DIM. ±.031	F DIM. MAX.	TERMINAL STYLE	MTG. HOLE FIG.	TRAN- SISTOR LEAD LENGTH FIG.	POLARI- ZATION FIG.
M8058-45G1	1	3	.200	.200	.265	.200	.406	TURRET	B	D	N
M8058-45G2	1	4	.200	.200	.265	.200	.406				N
8058-1G25	2	3	.200	.200	.270	.100	.330				N
8058-1G26	2	4	.200	.200	.270	.100	.330				N
8058-1G40	2	3	.200	.200	.335	.100	.330				N
M8058-1G29	3	3	.200	.200	.270	.140	.375	SOLDER POCKET	B		N
M8058-1G30	3	4	.200	.200	.270	.140	.375				N
M8058-1G23	4	3	.200	.200	.270	.300	.515	PRINTED CIRCUIT	—		N
M8058-1G24	4	4	.200	.200	.270	.300	.515				N
8058-1G84	4	4	.200	.200	.270	.100	1.235				N
8058-1G79	4	3	.200	.200	.270	.110	.325				N
8058-28G1	4	3	.200	.200	.270	.695	.930				N
8058-1G59	6	3	.200	.200	.175	.125					E	P
8058-1G62	7	3	.200	.200	.270	.500	.715	WIRE WRAPPING	B	N	
8058-1G63	7	4	.200	.200	.270	.500	.715			N	
8058-38G6	6	3	.200	.200	.175	.315		PRINTED CIRCUIT		P	
8058-1G58	2	5	.200	.200	.270	.094	.315	TURRET	B	D		N
8058-1G61	3	5	.200	.200	.270	.140	.370	SOLDER POCKET	B		N
8058-1G44	2	6 at 60°	.200	.200	.270	.094	.315	TURRET	B		N
M8058-1G39	2	6 at 45°	.200	.200	.270	.094	.315				N
8058-1G43	3	6 at 60°	.200	.200	.270	.140	.370	SOLDER POCKET	B		N
M8058-1G18	3	6 at 45°	.200	.200	.270	.140	.370				N
8058-1G42	4	6 at 60°	.200	.200	.270	.315	.550	PRINTED CIRCUIT	—		E	N
M8058-1G33	4	6 at 45°	.200	.200	.270	.315	.550			N	
8058-1G48	6	6 at 60°	.200	.200	.175	.125				P	
8058-1G52	6	6 at 45°	.200	.200	.175	.125		WIRE WRAPPING	B	P	
8058-1G65	7	6 at 60°	.200	.200	.270	.500	.715			N	
8058-1G64	7	6 at 45°	.200	.200	.270	.500	.715			N	
M8058-1G37	2	8	.200	.200	.270	.094	.315	TURRET	B	D	N
M8058-1G19	3	8	.200	.200	.270	.140	.370	SOLDER POCKET	B		N
8058-1G57	3	8	.200	.200	.270	.140	.320				N
M8058-1G32	4	8	.200	.200	.270	.315	.550	PRINTED CIRCUIT	—		N
8058-1G83	4	8	.200	.200	.270	1.000	1.230				N
8058-39G1	5	8	.200	.330	.375	.150	.515				N
8058-39G3	5	8	.200	.380	.375	.187	.515				N
8058-39G5	5	8	.200	.380	.375	.187	.515				PN
8058-1G49	6	8	.200	.200	.175	.125				E	P

8058 & 8060 Series

PART NO.	FIG.	NO. OF CON- TACTS	PIN CIRCLE	A DIM. REF.	B DIM. REF.	E DIM. ±.031	F DIM. MAX.	TERMINAL STYLE	MTG. HOLE FIG.	TRAN- SISTOR LEAD LENGTH FIG.	POLARI- ZATION FIG.
8058-1G47	2	8	.230	.230	.270	.094	.320	TURRET	B	D	N
8058-1G46	3	8	.230	.230	.270	.138	.370	SOLDER POCKET	B		N
8058-1G45	4	8	.230	.230	.270	.300	.530	PRINTED CIRCUIT	—		N
8058-28G4	4	8	.230	.230	.270	.700	.930				N
8058-39G4	5	8	.230	.380	.375	.187	.515				P
8058-39G6	5	8	.230	.380	.375	.187	.515				PN
8058-1G50	6	8	.230	.230	.175	.125			E	P	
M8058-1G38	2	10	.230	.230	.270	.094	.315	TURRET	B	D	N
M8058-1G22	3	10	.230	.230	.270	.138	.370	SOLDER POCKET	B		N
M8058-1G31	4	10	.230	.230	.270	.315	.550	PRINTED CIRCUIT	—		N
8058-28G2	4	10	.230	.230	.270	.730	.930				N
8058-28G3	4	10	.230	.230	.270	.730	.930				P
8058-24G1	5	10	.230	.380	.375	.187	.515				N
8058-1G34	6	10	.230	.230	.165	.125			E	P	
8058-1G68	7	10	.320	.320	.270	.500	.760	WIRE WRAPPABLE		C	P
M8058-1G91	6	10	.230	.230	.165	.125		PRINTED CIRCUIT		—	P
8058-1G27	3	11	.280	.280	.270	.140	.365	SOLDER POCKET	B	D	N
8058-1G21	5	11	.280	.380	.375	.187	.515	PRINTED CIRCUIT	—		N
8058-1G41	2	12	.280	.280	.270	.094	.315	TURRET	B		P
8058-1G28	3	12	.280	.280	.270	.140	.370	SOLDER POCKET	B		P
8058-1G54	4	12	.250	.250	.270	.315	.550	PRINTED CIRCUIT	—		N
8058-1G55	5	12	.250	.380	.270	.187	.515				N
8058-1G51	6	12	.280	.280	.175	.125				E	P
8058-1G76	4	14	.300	.300	.270	.315	.550				D

INSULATOR DIMENSIONS

PART NO.	C DIM. ± .005	D DIM. Max.
All 8060 Parts	.227	.255
All 8058 Parts Except	.373	.406
8058-1G68	.440	.510

Add "R" suffix to part number to recess socket terminals .010 "±.005".

MATERIAL SPECIFICATIONS

INSULATOR	Teflon TFC per Mil-P-19468
SLEEVE	Brass per QQ-B-626
CONTACT	Beryllium Copper per QQ-C-530
PLATING	Contact - Gold .000030 thk. per Mil-G-45204
	Sleeve - Gold.000020 thk. per Mil-G-45204 (Tin .0002 thk. per Mil-T-10727: 8058-1G79 only)

8058 & 8060 Series

FIG. A
RECOMMENDED CHASSIS CUTOUT
for all 8060 Series
Panel Mount Applications

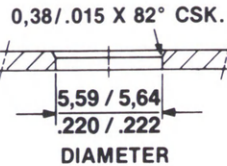


FIG. B
RECOMMENDED CHASSIS CUTOUT
for all 8058 Series
Panel Mount Applications

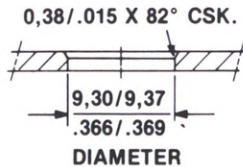


FIG. C
MOUNTING HOLE
11,07 / 11,13
.436 / .438

FIG. D
CUT TRANSISTOR LEADS
(Unless otherwise specified)
3,96 / 5,54
.156 / .218

FIG. E
CUT TRANSISTOR LEADS
3,18 / 4,19
.125 / .165

POLARIZATION NOTCH
1,59/.062 R. X 1,27/.050 DP.

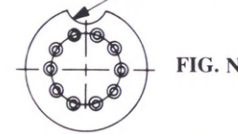


FIG. N

POLARIZATION DOT



FIG. P

POLARIZATION
N = NOTCH P = DOT

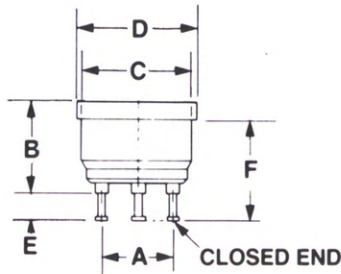


FIG. 1

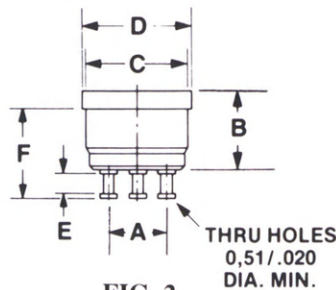


FIG. 2

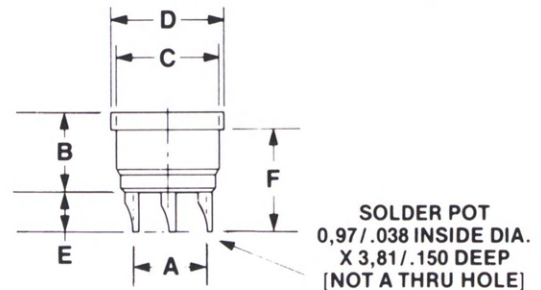


FIG. 3

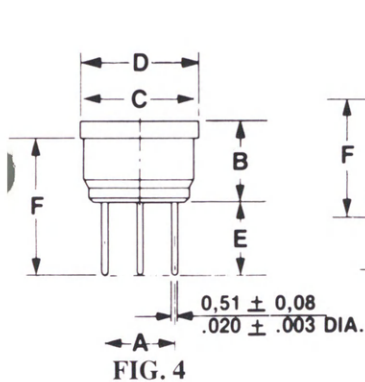


FIG. 4

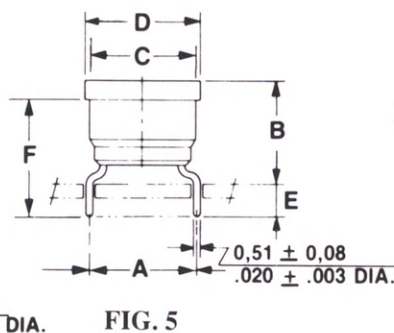


FIG. 5

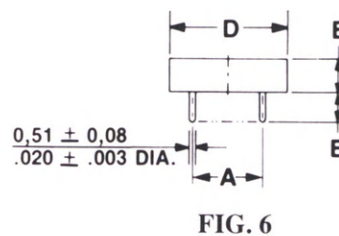


FIG. 6

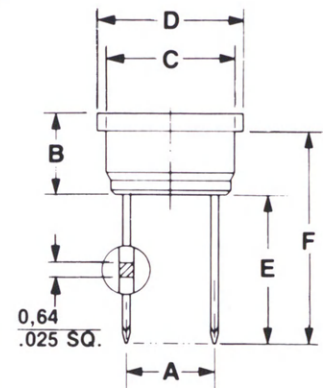


FIG. 7

Dimensions Specified In:

Millimeter
Inch

Tolerance: $\pm 0,13/005$
Unless Otherwise Specified

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	20 milliohms max. per M83502/1
CURRENT RATING	3 Amp DC, contact rating
OPERATING VOLTAGE	500 VDC, at atmospheric pressure
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	600V AC per Mil. Std. 1344, Method 3001
INSULATION RESISTANCE	2 x 10 ⁶ megohms, Method 3003 of Mil. Std. 1344
CAPACITANCE	2 pF max., Method 305 of Mil. Std. 202
OPERATING TEMPERATURE	-55°C to +125°C
CORROSIVE ATMOSPHERE	30 milliohms, ammonium polysulfide 10 ppm per M83502/1 Sec. 4.7.17
MOISTURE RESISTANCE	30 milliohms max., Method 106 of Mil. Std. 202
VIBRATION	15G's, 10 to 2K cycles, Method 2005 of Mil. Std. 1344
MECHANICAL SHOCK	10G's, 1 to 9K cycles, Method 2004 of Mil. Std. 1344
DURABILITY	50 insertions and withdrawals, M83502/1, Sec.4.7.12
THERMAL SHOCK	Method 1003 of Mil. Std. 1344
INSERTION FORCE	4.0 lb. max., .020 dia. $\pm 0,0000$ probe - .0002
WITHDRAWAL FORCE	1/2 oz. min., .016 dia. $\pm 0,0002$ probe - .0001
SOLDERABILITY	Method 208 of Mil. Std. 202,

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Quality
and Innovation

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Transistor Test and Burn-In Sockets

8092
Series

Series 8092 test and burn-in sockets for "TO" style packages. All contacts are recessed to eliminate any potential shock hazard when using high voltage test potential. Hollow sleeves eliminate need to cut transistor leads. Teflon insulator and beryllium copper contacts allow use in accelerated life test conditions. "Top hat" on insulator makes it easier to withdraw transistor after testing.

- Top hat feature promotes easier gripping of transistor to extract from socket.
- Recessed contact eliminates shock hazards when using high voltage.
- Low contact resistance.
- Chamfered entry holes facilitate fast insertion.
- Fast "Push-fit" mounting assures low installation cost.
- 8092-1 series accepts 0,38/.015 to 0,56/.022 diameter leads with 12,70/.500 minimum length.
- 8092-15 series accepts 0,38/.015 to 0,56/.022 diameter leads with 4,75/.187 minimum length.



MATERIAL SPECIFICATIONS

INSULATOR	Teflon, Type TFE per Mil-P-19468
CONTACT	Beryllium Copper per QQ-C-530
SLEEVE	8092-15, Brass per Mil-B-89; 8092-1, Brass per Mil-B-626
FINISH	Both parts are Gold plated .00003 thk. per Mil-G-45204, Type I, oner Nickel plate .00005 thk. per QQ-N-290

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	20 milliohms max.
CURRENT RATING	3 Amp DC
OPERATING VOLTAGE	750 VDC
DIELECTRIC WITHSTANDING VOLTAGE	600V AC per Mil. Std. 1344, Method 3001
INSULATION RESISTANCE	2 x 10 ⁶ megohms Mil. Std. 1344, Method 3003
CAPACITANCE	2 pF max., Mil. Std. 202, Method 305
OPERATING TEMPERATURE	-55°C to +125°C
CORROSIVE ATMOSPHERE	30 milliohms ammonium polysulfide 10 ppm per M83502/1 Sec. 4.7.17
MOISTURE RESISTANCE	30 milliohms max., Mil. Std. 202, Method 106
VIBRATION	15G's, 10 to 2K cycles, Mil. Std. 1344, Method 2005
MECHANICAL SHOCK	10G's, 1 to 9K cycles, Mil. Std. 1344, Method 2004
DURABILITY	50 insertions and withdrawals, M83502/1, Sec.4.7.12
THERMAL SHOCK	Mil. Std. 1344, Method 1003
INSERTION FORCE	4.0 lb. max., .020 dia. ±.0002 probe
WITHDRAWAL FORCE	1/2 oz. min., .016 dia. ±.0002 probe
SOLDERABILITY	Mil. Std. 202, Method 208

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8092 Series

PART NUMBER	FIG.	NO. OF CONTACTS	"TO" TYPE*	PIN CIRCLE	A	B	C	CONTACT LAYOUT	MOUNTING HOLE 0,38/.015 X 82° CSK. Fig. 4 (dwg)
8092-15G1	3	3	TO-5, TO-18	$\frac{3,04}{.120}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		$\frac{11,10}{.437}$
8092-1G1	1		TO-26, TO-37	$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	$\frac{1,77}{.070}$		
8092-15G2	3		TO-38, TO-39	$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		
8092-1G8	2		TO-42, TO-43 TO-55	$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	$\frac{1,77}{.070}$		
8092-1G2	1	4	TO-12, TO-33 TO-105	$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	$\frac{1,77}{.070}$		$\frac{11,10}{.437}$
8092-15G3	3			$\frac{3,04}{.120}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		
8092-15G4	3			$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		
8092-1G9	2			$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	$\frac{1,77}{.070}$		
8092-1G4	1	6	TO-75	$\frac{10,16}{.400}$	$\frac{19,05}{.750}$	$\frac{17,65}{.695}$	$\frac{4,31}{.170}$		$\frac{17,45}{.687}$
8092-1G11	2			$\frac{10,16}{.400}$	$\frac{19,05}{.750}$	$\frac{17,65}{.695}$	$\frac{4,31}{.170}$		
8092-15G5	3			$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		$\frac{11,10}{.437}$
8092-1G3	1			$\frac{7,92}{.312}$	$\frac{19,05}{.750}$	$\frac{17,6}{.693}$	$\frac{4,31}{.170}$		$\frac{17,45}{.687}$
8092-1G10	2			$\frac{7,92}{.312}$	$\frac{19,05}{.750}$	$\frac{17,6}{.693}$	$\frac{4,31}{.170}$		
8092-15G6	3			$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		
8092-15G14	3			N/A	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		$\frac{11,10}{.437}$
8092-1G5	1	8	TO-76, TO-77	$\frac{10,16}{.400}$	$\frac{19,05}{.750}$	$\frac{17,65}{.695}$	$\frac{4,31}{.170}$		$\frac{17,45}{.687}$
8092-1G12	2		TO-79, TO-80	$\frac{10,16}{.400}$	$\frac{19,05}{.750}$	$\frac{17,65}{.695}$	$\frac{4,31}{.170}$		
8092-15G7	3		TO-99, TO-78	$\frac{5,08}{.200}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		$\frac{11,10}{.437}$
8092-15G8	3			$\frac{5,84}{.230}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		
8092-1G6	1	10	TO-96, TO-97 TO-100	$\frac{10,66}{.420}$	$\frac{19,05}{.750}$	$\frac{17,7}{.697}$	$\frac{4,31}{.170}$		$\frac{17,45}{.687}$
8092-1G13	2			$\frac{10,66}{.420}$	$\frac{19,05}{.750}$	$\frac{17,7}{.697}$	$\frac{4,31}{.170}$		
8092-15G9	3			$\frac{5,84}{.230}$	$\frac{12,7}{.500}$	$\frac{11,3}{.445}$	N/A		$\frac{11,10}{.437}$
8092-1G7	1	12		$\frac{12,95}{.510}$	$\frac{20,62}{.812}$	$\frac{19,27}{.759}$	$\frac{4,31}{.170}$		$\frac{19,05}{.705}$
8092-1G14	2			$\frac{12,95}{.510}$	$\frac{20,62}{.812}$	$\frac{19,27}{.759}$	$\frac{4,31}{.170}$		
8092-15G11	3			$\frac{6,98}{.275}$	$\frac{12,7}{.500}$	$\frac{11,32}{.446}$	N/A		$\frac{11,10}{.437}$

* All "TO" packages within a given socket configuration will mount in any of the sockets covered by that configuration.



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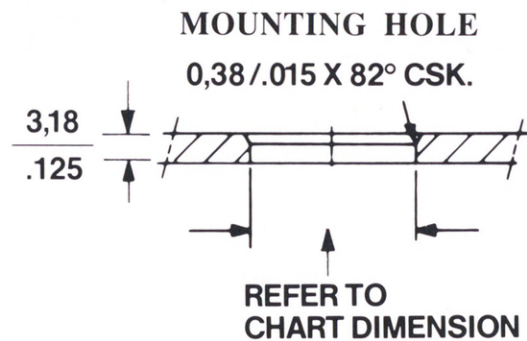
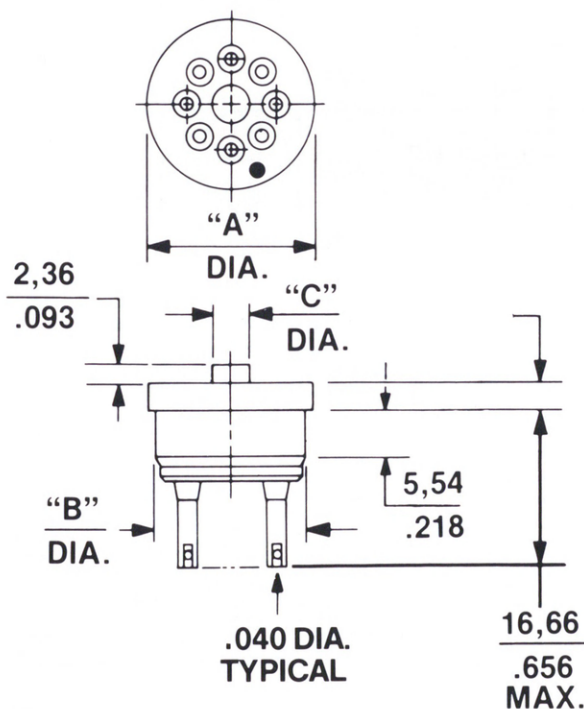
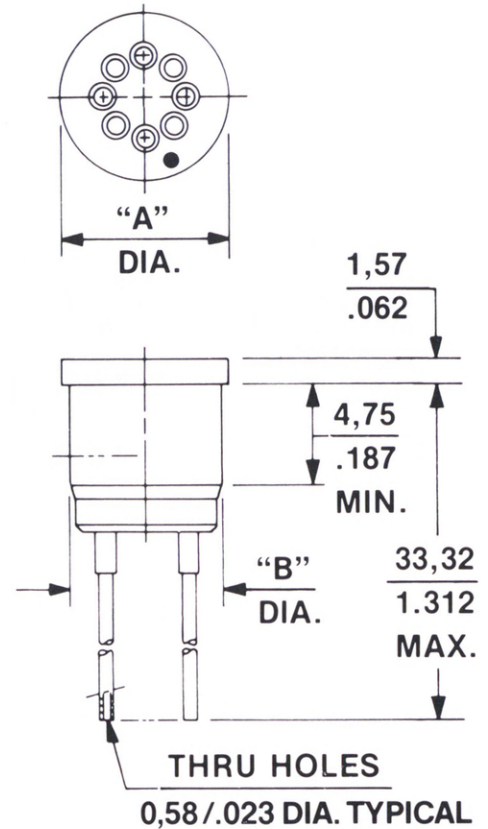
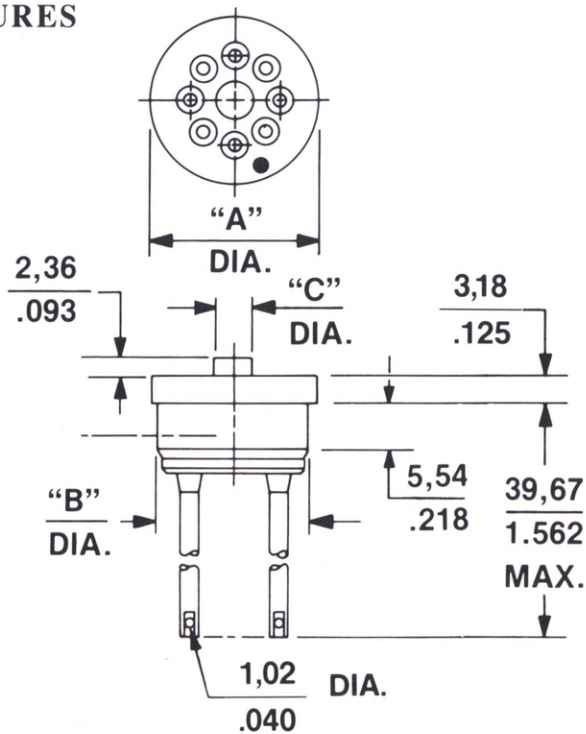
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8092 Series

FIGURES



Dimensions Specified In:

Millimeter	Millimeter/Inch
Inch	

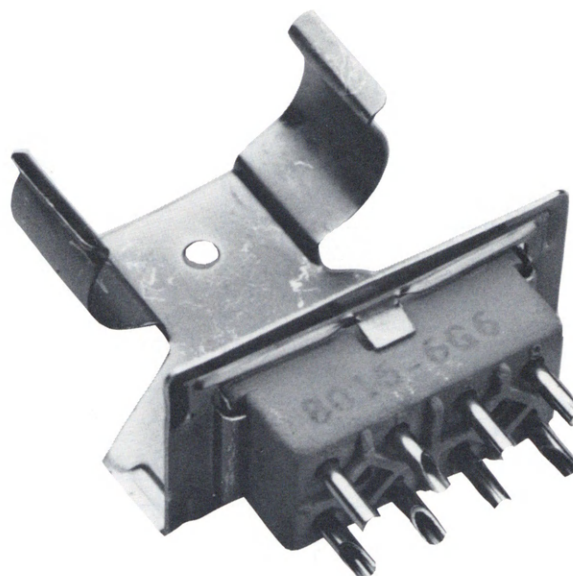
Tolerance: $\pm 0,13/005$
Unless Otherwise Specified

Relay Socket Assemblies

8000
Series

Augat's family of Micro-Miniature Relay Socket assemblies combine holding clip and built-in socket for unmatched reliability under severe conditions of shock and vibration.

- Promotes serviceability of relay replacement
- Small package outline limits board space required
- Vertical and horizontal mounting styles on .200 x .200 relay format
- Printed circuit or discrete wire interconnection pin styles



MATERIAL SPECIFICATIONS

HOLDING CLIP	Beryllium copper, alloy 172 per QQ-C-533, heat treated to 15N 73-79, cadmium plated per QQ-P-416, Class 2, Type II golden iridite
SPACERS	(Used for vertical printed circuit mounting) Brass, per QQ-B-626, cadmium plated per QQ-P-416, Class 2, Type II golden iridite
INSULATION	Diallyl Phthalate per Mil-M-14, Type MDG
CONTACTS	Unless otherwise specified, precision turned spring temper phosphor bronze per QQ-B-750, Comp "A," silver and gold plated

PERFORMANCE CHARACTERISTICS

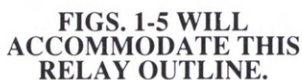
CURRENT RATING	5 amperes
VOLTAGE BREAKDOWN (SEA LEVEL)	1000 rms Min.
VOLTAGE BREAKDOWN (70,000 FT)	450 rms Min.
VIBRATION	With relay mounted, 10 to 2000 Hz and return to 10 Hz in 1 hour at 30 G's vibrating in plane parallel to relay contacts. No movement of relay or damage to assembly.
SHOCK	With relay mounted, 100 G's in each of 3 mutually perpendicular planes. No movement of relay or damage to assembly. Note: Vibration and shock requirements apply to socket clip assemblies regarding movement of relay.
OPERATING TEMPERATURE RANGE	-65°C to +125°C
SALT SPRAY	per Mil-Std-202A, 48 hours, no breakdown of plating or damage to base metal

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8000 Series



Normally furnished with solder cup contacts. Add "T" to part number for turret type contacts



APPROX. WEIGHT: .013lb.
Patent No. 3061811

FIG. 2
RECOMMENDED
PANEL CUTOUT

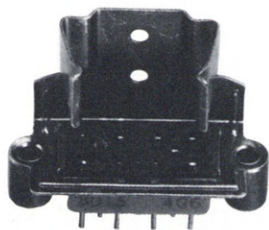
NO. OF CONTACTS	AUGAT NO.
8	8015-1G4A
10	8016-1G4A

FIG. 3
RECOMMENDED
PANEL CUTOUT

Add "T" to part number
for turret type contacts.

APPROX. WEIGHT: .013 lb.
Patent No. 3061811

8 OR 10 CONTACTS



VERTICAL PRINTED CIRCUIT MOUNTING

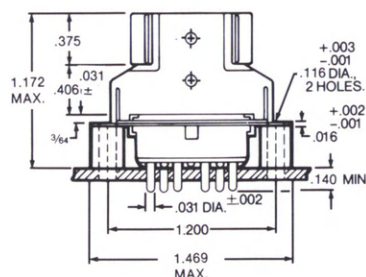


FIG. 4

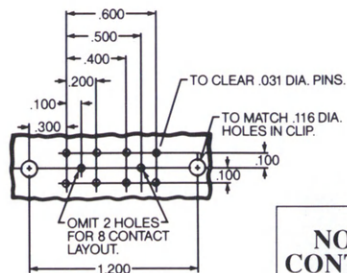
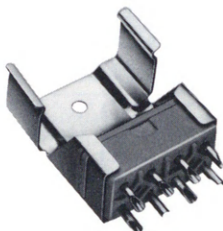


FIG. 4
RECOMMENDED
PANEL CUTOUT

NO. OF CONTACTS	AUGAT NO.
8	8015-1G6A
10	8016-1G6A

APPROX. WEIGHT: .020 lb.
Patent No. 3061811

8 OR 10 CONTACTS



**NEW COMPACT DESIGN
HORIZONTAL MOUNTING
(Solder Cup or Turret Contacts)**

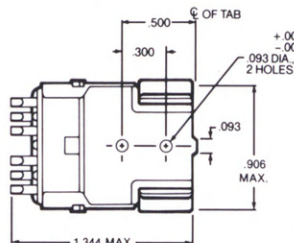
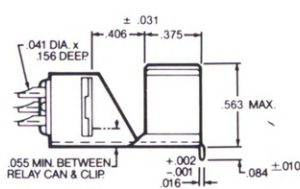


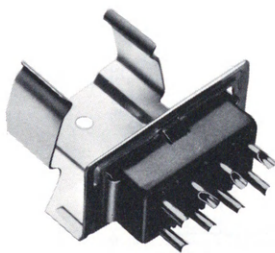
FIG. 5



NO. OF CONTACTS	ANTI-ROTATE TAB	AUGAT NO.
8	WITH	8047-1G1A
8	WITHOUT	8047-1G2A

APPROX. WEIGHT: .016 lb.
Patent No. 3061811 (Other Patents Pending)

8 CONTACTS



HORIZONTAL MOUNTING (Solder Cup or Turret Contacts)

Normally furnished with solder cup contacts. Add "T" to part number for turret type contacts

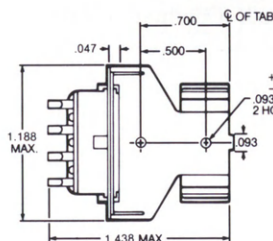
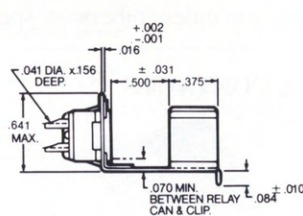
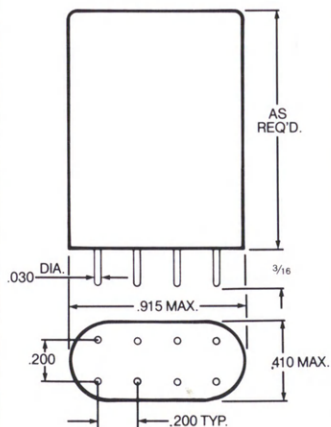


FIG. 6



NO. OF CONTACTS	ANTI-ROTATE TAB	AUGAT NO.
8	WITH	8017-1G1A
8	WITHOUT	8017-1G2A

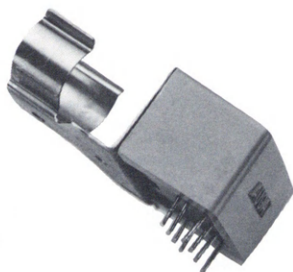
APPROX. WEIGHT: .013lb.
Patent No. 3061811



**FIGS. 6-17 WILL
ACCOMMODATE THIS
RELAY OUTLINE.**

8000 Series

8 CONTACTS



**HORIZONTAL PRINTED
CIRCUIT MOUNTING**

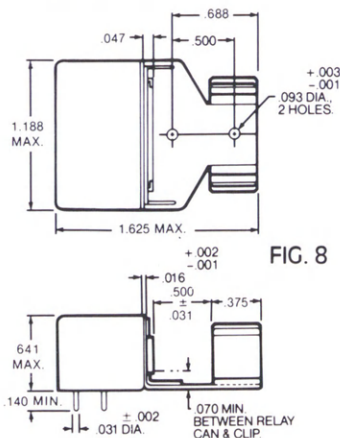
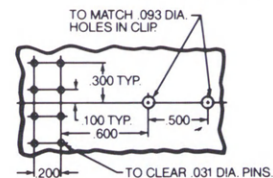


FIG. 8

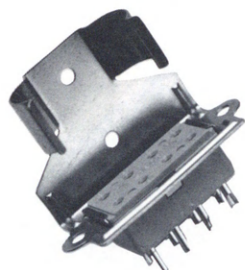
FIG. 7 RECOMMENDED PANEL COUTOUT



NO. OF CONTACTS	AUGAT NO.
8	8017-1G4A

APPROX. WEIGHT: .021 lb.
Patent No. 3061811

8 CONTACTS



VERTICAL MOUNTING
(Solder Cup of Turret Contacts)

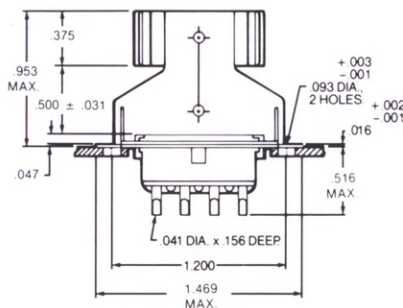
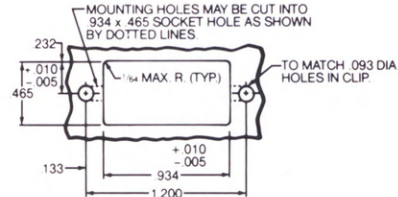


FIG. 9

Normally furnished with
solder cup contacts.

Add "T" to part number
for turret type contacts.

FIG. 10 RECOMMENDED PANEL CUTOUT

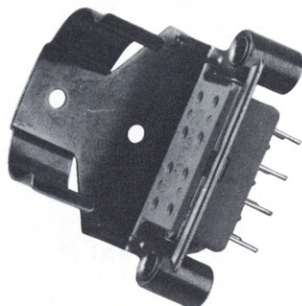


NO. OF CONTACTS	AUGAT NO.
8	8017-1G4A

APPROX. WEIGHT: .013 lb.
Patent No. 3061811

Tolerances unless otherwise specified: Decimals $\pm .005$ Fractions $\pm 1/64$

8 CONTACTS



**VERTICAL PRINTED
CIRCUIT MOUNTING**

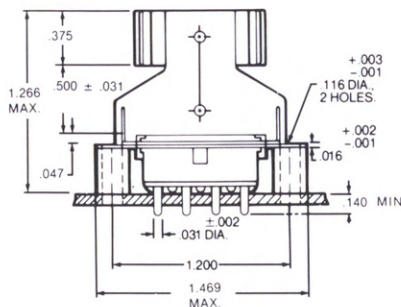
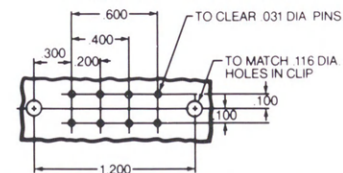


FIG. 11

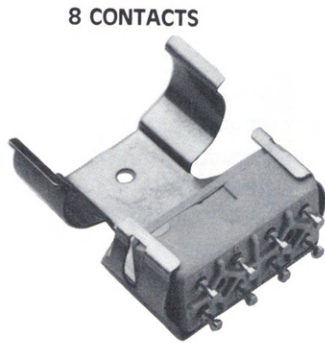
FIG. 12 RECOMMENDED PANEL CUTOUT



NO. OF CONTACTS	AUGAT NO.
8	8016-1G4A

APPROX. WEIGHT: .020 lb.
Patent No. 3061811

8 CONTACTS



NEW COMPACT DESIGN HORIZONTAL MOUNTING

*(Solder Cup or
Turret Contacts)*

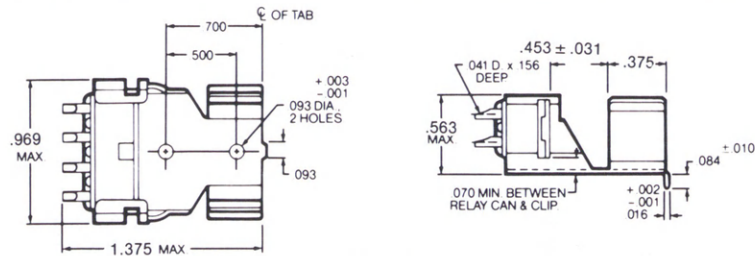
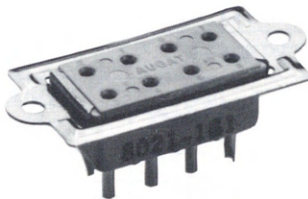


FIG. 13

ANTI-ROTATE TAB	CONTACT TERMINAL	AUGAT NO.
WITH	SOLDER POCKET	8049-1G1A
WITHOUT	SOLDER POCKET	8049-1G2A
WITH	TURRET	8049-1G3A
WITHOUT	TURRET	8049-1G4A

APPROX. WEIGHT: .013 lb. Patent No. 3061811

**INDIVIDUAL SOCKETS
FOR 8 AND 10
PIN RELAYS
8 OR 10 CONTACTS**



**SOCKET ONLY WITH STEEL
MOUNTING SADDLE**
*(Solder Cup or
Turret Contacts
or printed circuit pins)*

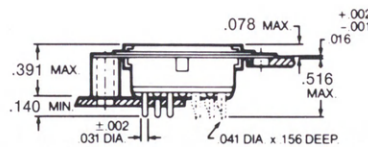
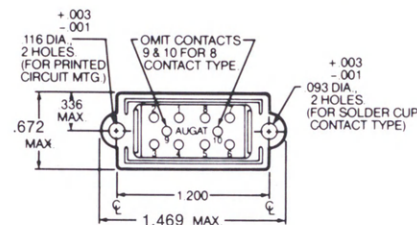


FIG. 15

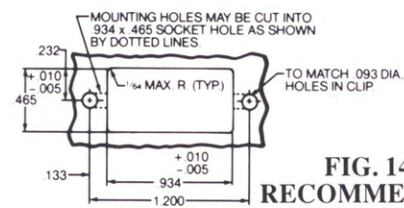


FIG. 14
RECOMMENDED
PANEL CUTOUT
Chassis Mounting

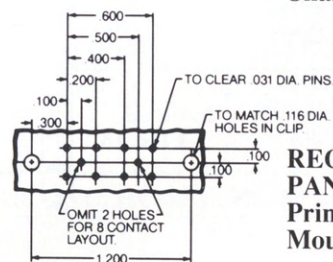


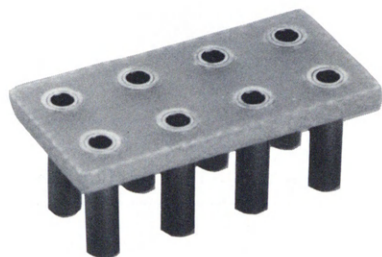
FIG. 16
RECOMMENDED
PANEL CUTOUT
Printed Circuit
Mounting

NO. OF CONTACTS	SOCKET INSULATION	AUGAT NO.		
		Solder Cup Type	Printed Circuit Type	Turret Type
8	Diallyl Phthalate	8021-1G1	8026-1G1	8065-1G3
10	Diallyl Phthalate	8022-1G1	8027-1G1	8066-1G1

APPROX. WEIGHT: .009 lb.

8000 Series

8 OR 10 CONTACTS



**1/16" GLASS
EPOXY INSULATOR**
(For low profile printed
circuit mounting)

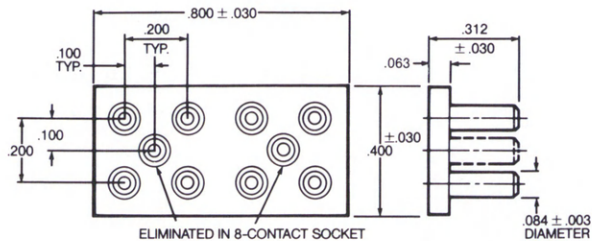


FIG. 17

AUGAT PIN NUMBERS	NO. OF CONTACTS	INSULATOR	TERMINATION
8015-19G1	8	Glass Epoxy	Printed Circuit
8016-6G1	10	Glass Epoxy	Printed Circuit

**INDIVIDUAL LEAD
SOCKETS FOR BOARD
INSERTION WITH
MINIMUM PROFILE
REQUIREMENTS**



"BARB" DESIGN ASSURES POSITIVE RETENTION
IN PRINTED CIRCUIT BOARD, ALLOWS SIMPLE
ARBOR TOOL INSERTION.

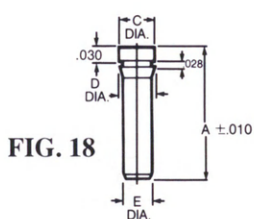


FIG. 18

FIG. 19

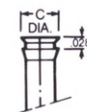
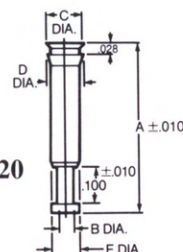


FIG. 20



PART NO.	FIG.	PIN DIAM- ETER RANGE	PIN LENGTH RANGE	A	± .005 B	± .003 C	± .003 D	± .003 E	RECOM- MENDED MOUNTING HOLE
LSG-3CG1-1	20	.030-.040	.187/.28	.432	.045	.100	.096	.084	#43 DRILL (.089 dia. ref.)
LSG-3DG1-1	19			.312	...	.100	.096	.084	
LSG-3DG2-1	18			.332	...	.100	.093	.084	#44 DRILL (.086 dia. ref.)

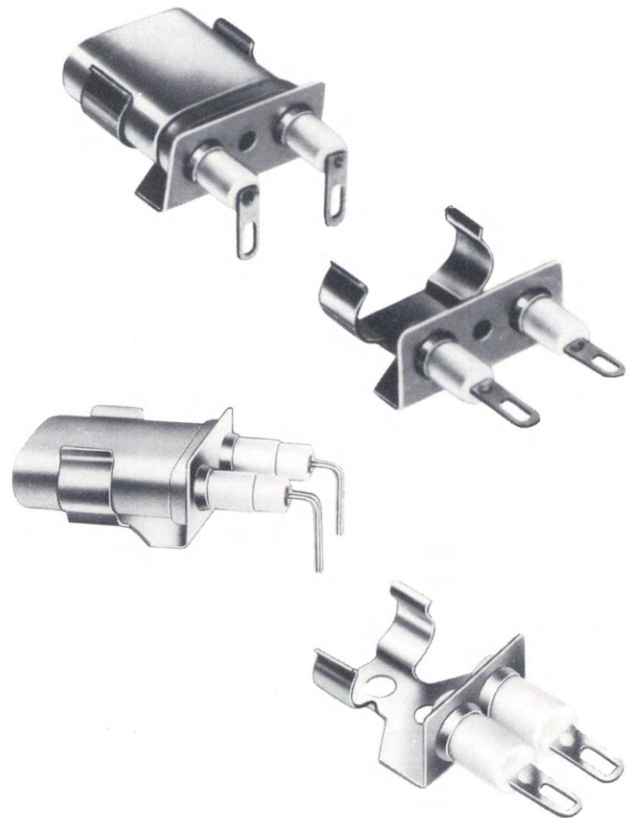
Tolerances unless otherwise specified: Decimals ± .005 Fractions ± 1/64

Crystal Socket Assemblies

8000-AG/DG Series 8004-1G Series

The Augat crystal socket assembly is a high quality component combining modern packaging techniques with superior materials to give compact unit construction and insure dependable mechanical and electrical life. Developed for use with a broad spectrum of crystal sizes, the crystal package can easily be inserted and removed without removing and adjusting latches and/or screws. Once the crystal has been installed it will not shake loose even under severe vibration.

- 8000 Series miniature style is designed to accommodate HC-6/U, HC-13/U, HC-14/U, HC-27/U, HC-36/U and HC-48/U crystal sizes
- 8004 Series subminiature style is designed to accommodate HC-18/U, HC-25/U, HC-42/U, HC-43/U, HC-49/u and HC-50/U crystal sizes
- Contact designs include flow-solder, horizontal solder eyelet and right angle solder eyelet tails, in both machined sleeve and stamped contact variations
- Provides maximum protection of crystal devices in severe shock and vibration environments
- Insulators offered in Teflon and nylon materials
- Broad range of clip and contact materials
- Acts as additional heat sink to protect crystal against temperature variations
- Custom designs available for special applications



PART NUMBER DESIGNATIONS

ACCEPTS .017 DIA. LEADS CRYSTAL STYLES: HC-18/U, HC-43/U, HC-49/U								
SOCKET PART NUMBER	FIG.	DESCRIPTION	CLIP MATERIAL	CLIP PLATING	CONTACT MATERIAL	CONTACT DESIGN	CONTACT PLATING	INSULATION MATERIAL
8004-2301	1	Horizontal printed circuit mount with anti-rotating tabs	Beryllium Copper	Cadmium	Beryllium Copper	Machined	30μ inch Gold	Teflon
ACCEPTS .040 DIA. LEADS CRYSTAL STYLES: HC-25/U, HC-42/U, HC-50/U								
SOCKET PART NUMBER	FIG.	DESCRIPTION	CLIP MATERIAL	CLIP PLATING	CONTACT MATERIAL	CONTACT DESIGN	CONTACT PLATING	INSULATION MATERIAL
8004-1G3	2A	Horizontal printed circuit mount with anti-rotating tabs	Phosphor Bronze	Cadmium	Phosphor Bronze	Stamped	30μ inch Gold	Teflon
8004-1G16	1		Beryllium Copper		Beryllium Copper	Machined		
8004-1G40	3		Steel		Phosphor Bronze	Stamped		300μ inch Cadmium
8004-1G7	2A							



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8000-AG/DG Series 8004-1G Series

SOCKET PART NUMBER	FIG.	DESCRIPTION	CLIP MATERIAL	CLIP PLATING	CONTACT MATERIAL	CONTACT DESIGN	CONTACT PLATING	INSULATION MATERIAL
8004-1G4	2A	Horizontal printed circuit mount without anti- rotating tabs	Beryllium Copper	Cadmium	Phosphor Bronze	Stamped	30μ inch Gold	Teflon
8004-1G23	1				Beryllium Copper	Machined			50μ inch Gold
8004-1G38	1							
8004-1G23-5	1							
8004-1G8	2A	Steel	300μ inch Cadmium		Nylon			
8004-1G1	2	Beryllium Copper				30μ inch Gold	Teflon	
8004-1G5	2	Steel				300μ inch Cadmium	Nylon	
8004-1G2	2	Beryllium Copper				30μ inch Gold	Teflon	
8004-1G21-5	2	Horizontal or vertical mounting with anti-rotate tabs	Steel		50μ inch Gold			
8004-1G13	5	Vertical mounting with no anti- rotating tabs	Beryllium Copper		30μ inch Gold	Teflon		
8004-1G37	5			100μ inch Gold				

8000-AG/DG Series 8004-1G Series

SOCKET PART NUMBER	FIGURE #	DESCRIPTION	CLIP MATERIAL	CLIP PLATING	CONTACT MATERIAL	CONTACT DESIGN	CONTACT PLATING	INSULATION MATERIAL
8004-1G15	5	Vertical mounting with no anti-rotating tabs	Steel	Cadmium	Phosphor Bronze	Stamped	100μ inch Silver	Nylon
8004-1G26	5		Beryllium Copper		Beryllium Copper		30μ inch Gold	Teflon

ACCEPTS .050 DIA. LEADS CRYSTAL STYLES: HC-6/U, HC-13/U, HC-14/U, HC-27/U, HC-36/U, HC-48/U

SOCKET PART NUMBER	FIGURE #	DESCRIPTION	CLIP MATERIAL	CLIP PLATING	CONTACT MATERIAL	CONTACT DESIGN	CONTACT PLATING	INSULATION MATERIAL	
8000-AG1	8	Horizontal or vertical mounting with anti- rotating tabs	Beryllium Copper	Cadmium	Phosphor Bronze	Stamped	30μ inch Gold	Teflon	
8000-AG21-5	8				Beryllium Copper		50μ inch Gold		
8000-AG2	8	Horizontal or vertical mounting without anti- rotating tabs	Beryllium Copper		Phosphor Bronze		30μ inch Gold		Nylon
8000-AG2-5	8						50μ inch Gold		
8000-AG20-5	8								
8000-AG6-1	8	Steel					200μ inch Tin	Teflon	
8000-AG6	8						300μ inch Cadmium		
8000-AG9	10	Horizontal printed circuit mounting brass insert anti- rotation tabs					Beryllium Copper	30μ inch Gold	Nylon
8000-AG10	10	Horizontal printed circuit mounting steel insert anti- rotation tabs					Steel	300μ inch Cadmium	
8000-AG10-1	10							200μ inch Tin	

8000-AG/DG Series 8004-1G Series

SOCKET PART NUMBER	FIG.	DESCRIPTION	CLIP MATERIAL	CLIP PLATING	CONTACT MATERIAL	CONTACT DESIGN	CONTACT PLATING	INSULATION MATERIAL		
8000-AG3	8A	Horizontal printed circuit with anti- rotating tabs	Beryllium Copper	Cadmium	Phosphor Bronze	Stamped	30μ inch Gold	Teflon		
8000-AG36	9		Steel				200μ inch Tin	Nylon		
8000-AG7	8A								300μ inch Cadmium	
8000-AG32	10									200μ inch Tin
8000-AG43	10										30μ inch Gold
8000-AG4	8A	Beryllium Copper							Teflon	
8000-AG8	8A	Steel	300μ inch Cadmium				Nylon			
8000-AG8-1	8A							200μ inch Tin		
8000-DG1	12	Horizontal printed circuit mounting with anti-rotation tabs	Steel		Beryllium Copper	Machined	30μ inch Gold	Teflon		
8000-DG32	12									
8000-DG11	15									
8000-DG34	15									
8000-DG2	12	Horizontal printed circuit mounting without anti- rotation tabs					50μ inch Gold			
8000-DG2-5	12								100μ inch Gold	
8000-DG36	12									
8000-DG3	12								30μ inch	

8000-AG/DG Series

8004-1G Series

SOCKET PART NUMBER	FIG.	DESCRIPTION	CLIP MATERIAL	CLIP PLATING	CONTACT MATERIAL	CONTACT DESIGN	CONTACT PLATING	INSULATION MATERIAL
8000-DG35	13A	Vertical printed circuit with anti-rotation tabs	Beryllium Copper	Cadmium	Beryllium Copper		200 μ inch Tin	Teflon

MATERIAL SPECIFICATIONS

INSULATORS	Teflon, Type TFE per Mil-P-19468 Blue Nylon, MIL-M-20693,UL 94-V2
CONTACTS	Beryllium Copper per QQ-C-530 Phosphor Bronze, Composition B, per MIL-B-892
CONTACT PLATING	(See Chart)
HOLDING CLIPS	Beryllium Copper Alloy 172, per QQ-C-533, heat treated to 15N-73-79, Cadmium plated per QQ-P-416A, Class 2, Type II, Gold Iridite Carbon steel per QQ-S-777 heat treated to 15N-80-83, Cadmium plated per QQ-P-416A Class 2, Type II, Gold Iridite

PERFORMANCE CHARACTERISTICS 8000 SERIES

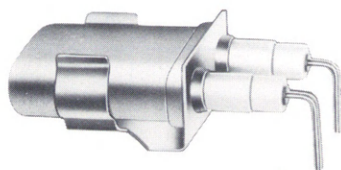
BULK RESISTANCE	15 milliohms at 30 millivolts
CAPACITANCE TO GROUND (CONTACT TO HOLDING CLIP) .....	.5pF at 1000 Hz
CAPACITANCE BETWEEN CONTACTS .....	.3 pF at 1000 Hz
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	2500V RMS at sea level 400V RMS at 70,000 ft.
VIBRATION	10 to 2000 Hz at 15 G's with crystal mounted, no movement of crystal or damage assembly
TEMPERATURE RANGE (FOR CRYSTAL SOCKET ONLY)	-55°C to +125°C
SALT SPRAY	5% for 48 hours, no breakdown of plating or damage to base metal

PERFORMANCE CHARACTERISTICS 8004 SERIES

BULK RESISTANCE	10 milliohms
CAPACITANCE TO GROUND (CONTACT TO HOLDING CLIP) .....	.8pF
CAPACITANCE BETWEEN CONTACTS .....	.5 pF
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	2500V RMS
VIBRATION	10 to 2000 Hz at 15 G's
TEMPERATURE RANGE (FOR CRYSTAL SOCKET ONLY)	-55°C to +125°C
SALT SPRAY	5% solutions for 48 hours



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8004 - SERIES
machined sleeve
Patent No.
3061811

Crystal Outline Drawing

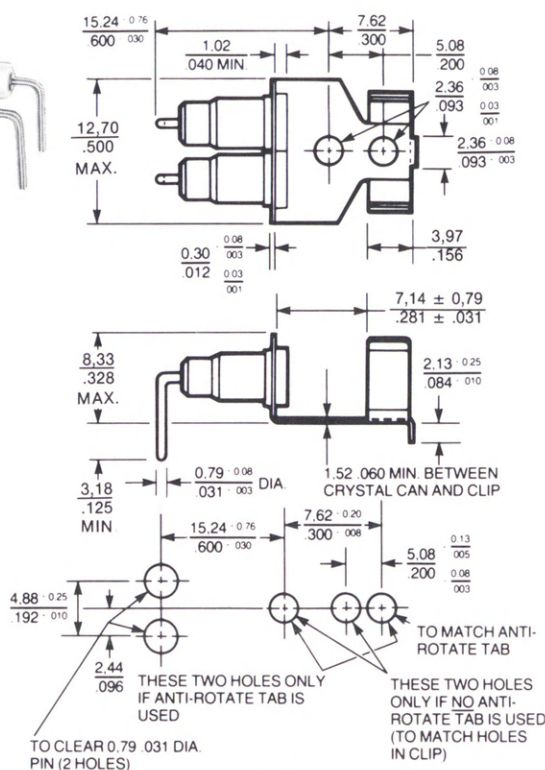
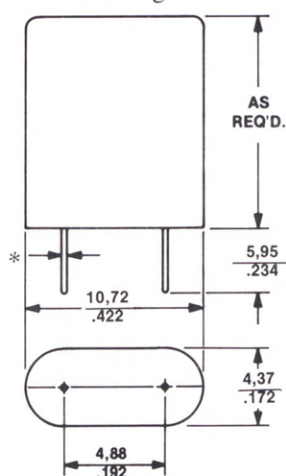


FIG. 1
RECOMMENDED CHASSIS CUTOUT

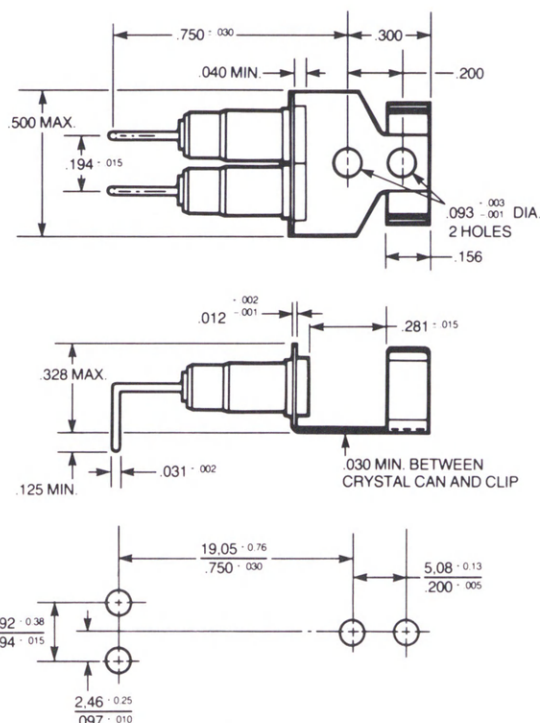


FIG. 4
RECOMMENDED CHASSIS CUTOUT

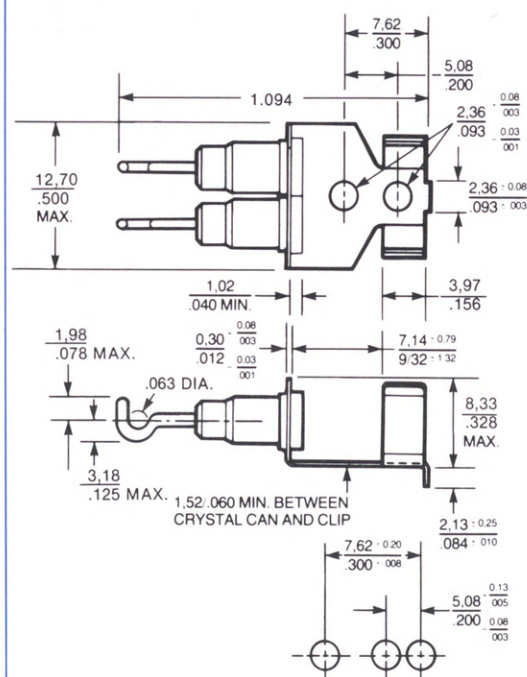


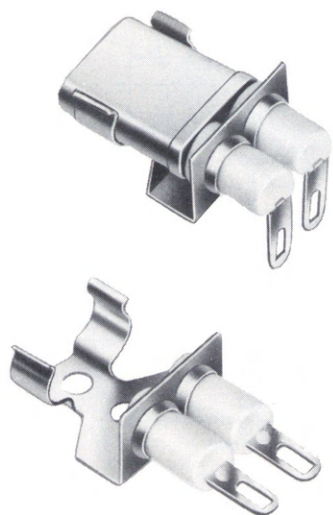
FIG. 6
RECOMMENDED PANEL CUTOUT

* Socket pin diameter for appropriate crystal outline.

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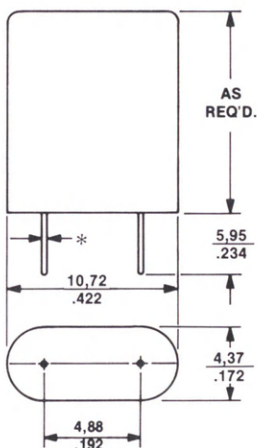
8000-AG/DG Series 8004-1G Series



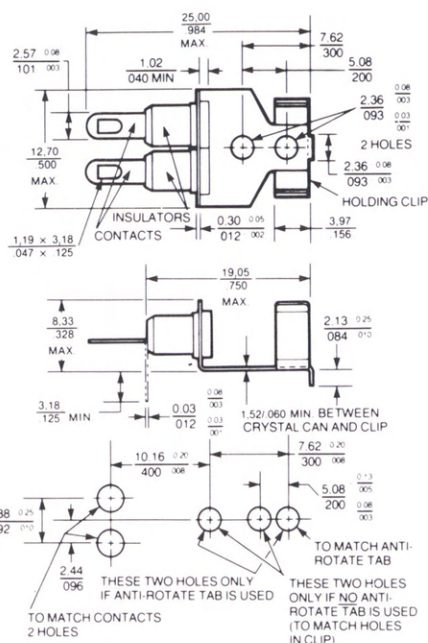
8004-SERIES

stamped
contact
Patent No.
3061811

Crystal
Outline
Drawing

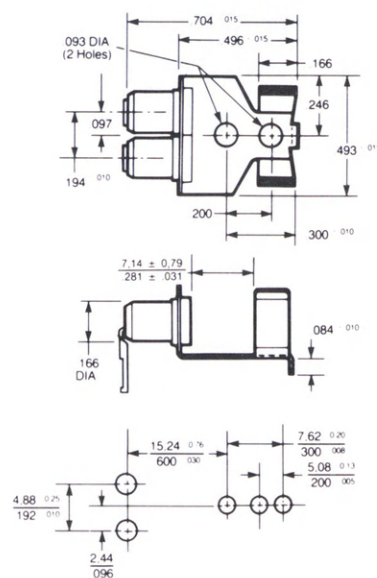


* Socket pin diameter for appropriate
crystal outline.



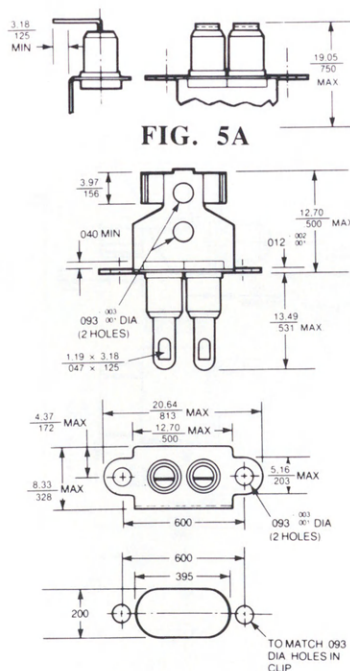
RECOMMENDED CHASSIS CUTOUT
FOR HORIZ. OR P.C. MOUNTING

FIG. 2 HORIZONTAL
FIG. 2A PRINTED CIRCUIT
TERMINATION



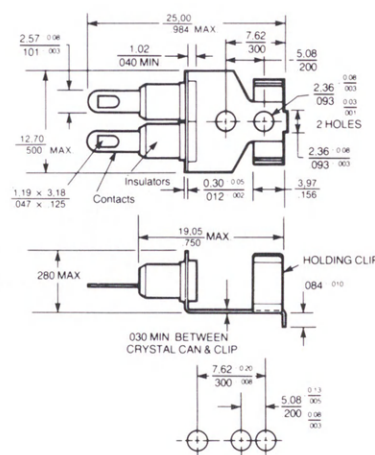
RECOMMENDED CHASSIS
CUTOUT

FIG. 3



RECOMMENDED PANEL CUTOUT

FIG. 5



RECOMMENDED PANEL
CUTOUT

FIG. 7



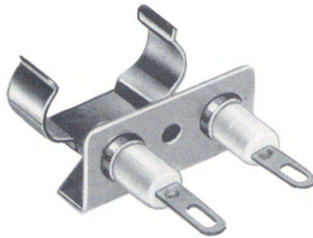
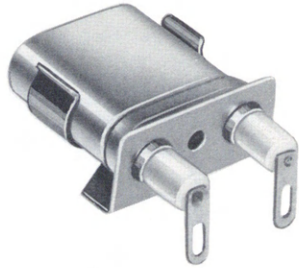
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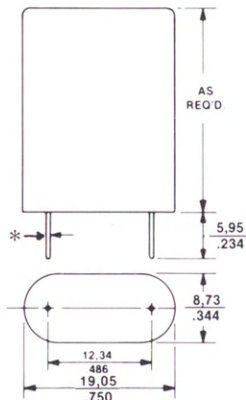
8000-AG/DG Series 8004-1G Series



8000 SERIES

stamped
contact
Patent No.
3061811

Crystal
Outline
Drawing



* Socket pin diameter for appropriate
crystal outline.

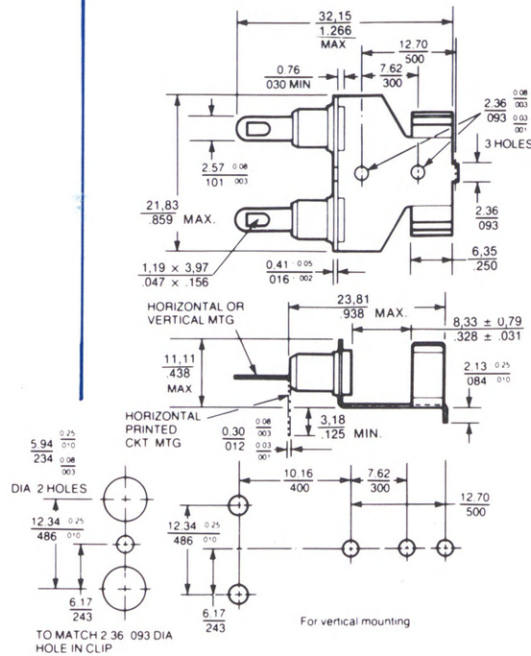


FIG. 8 HORIZONTAL TERMINAL
FIG. 8A PRINTED CIRCUIT TERMINATION

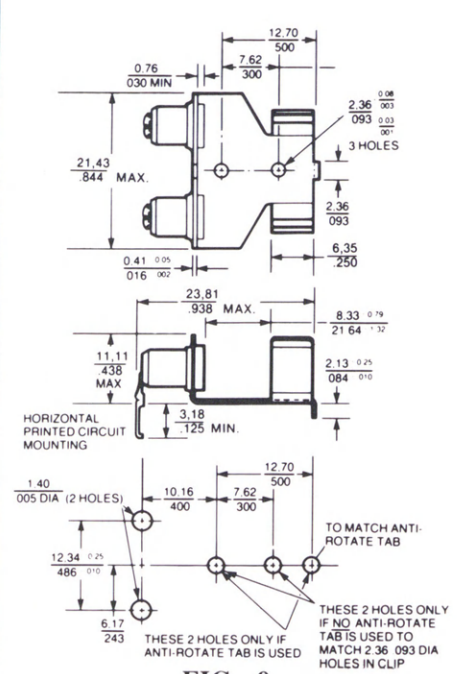


FIG. 9

RECOMMENDED CHASSIS CUTOUT

FOR HORIZ. OR P.C. MOUNTING

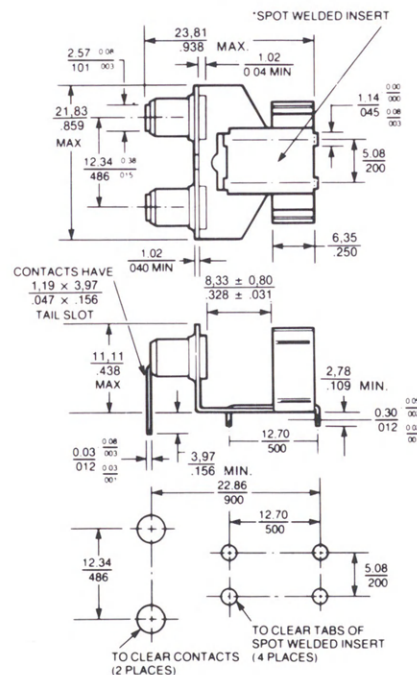


FIG. 10

RECOMMENDED CHASSIS CUTOUT

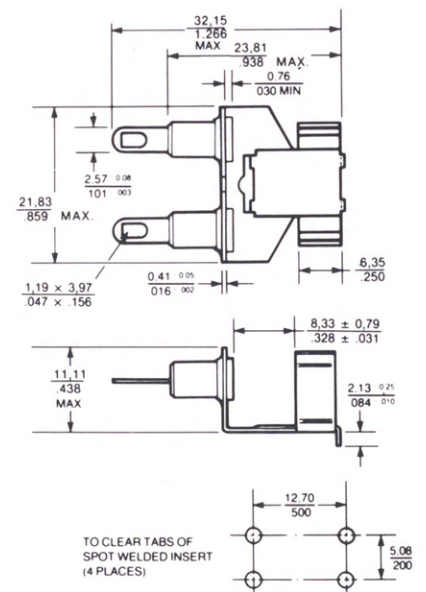


FIG. 11

RECOMMENDED CHASSIS CUTOUT

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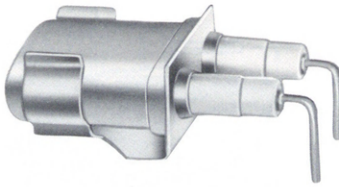
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AUGAT® Quality
and Innovation

8000-AG/DG Series 8004-1G Series



8004-SERIES

machined
sleeve
Patent No.
3061811

Crystal
Outline
Drawing

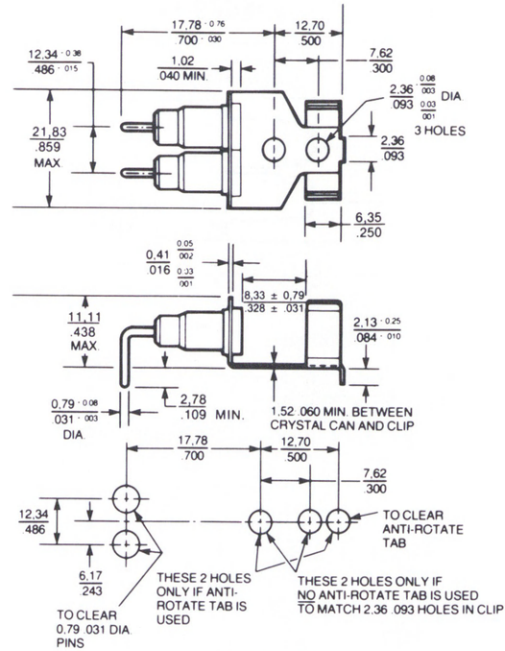
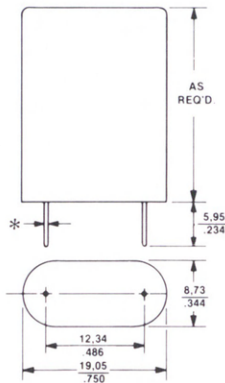


FIG. 12

RECOMMENDED CHASSIS CUTOUT

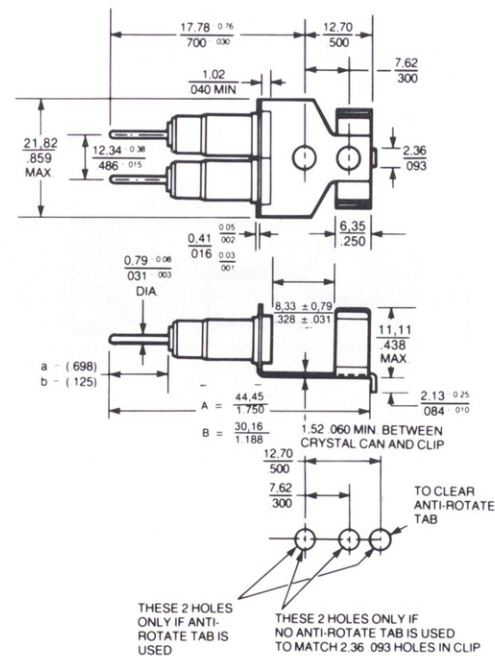


FIG. 13

RECOMMENDED CHASSIS CUTOUT
HORIZONTAL PRINTED CIRCUIT MOUNTING
WITH OR WITHOUT ANTI-ROTATE TAB
(SCREW MACHINE CONTACTS)

* Socket pin diameter for appropriate crystal outline.



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8000-AG/DG Series 8004-1G Series

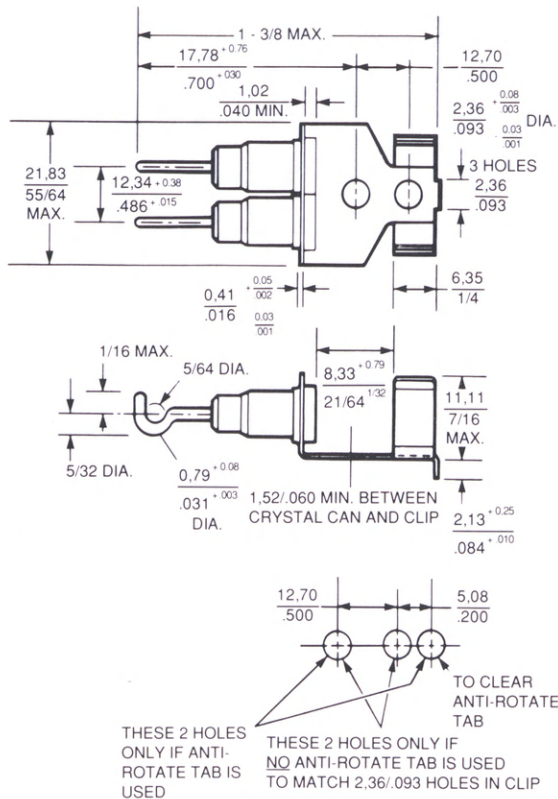


FIG. 14

RECOMMENDED CHASSIS CUTOUT

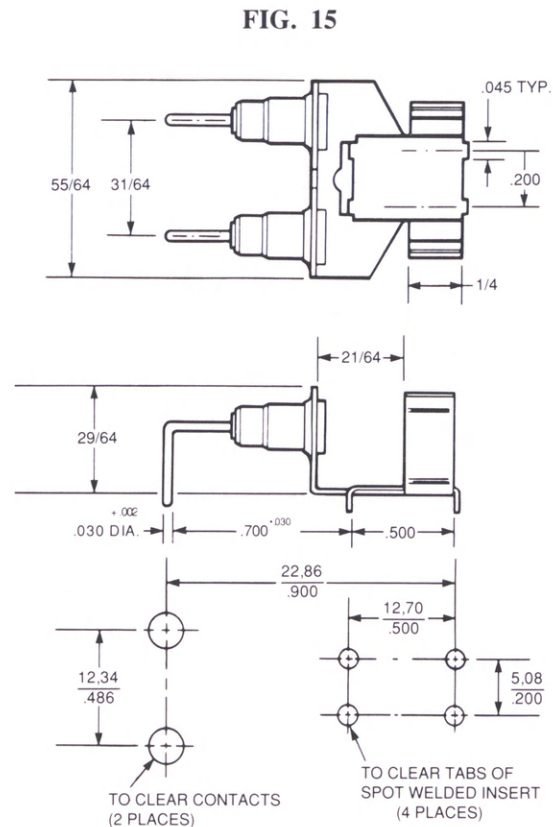


FIG. 15A

RECOMMENDED CHASSIS CUTOUT

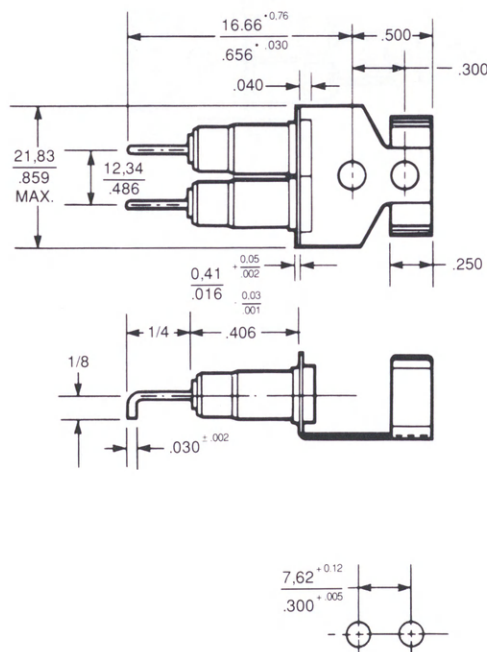


FIG. 16

RECOMMENDED CHASSIS CUTOUT

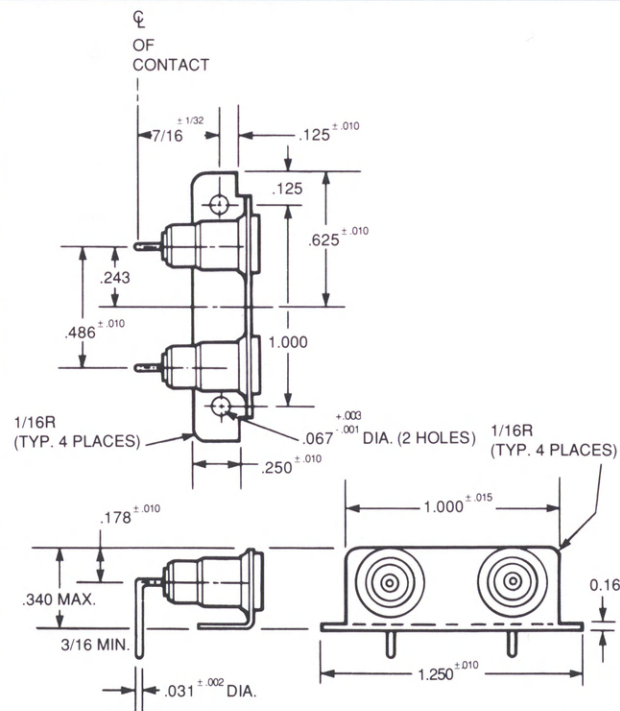
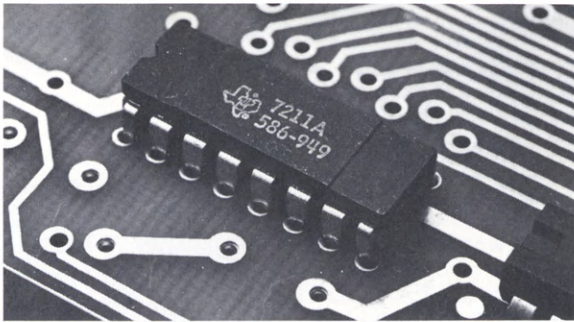


FIG. 17

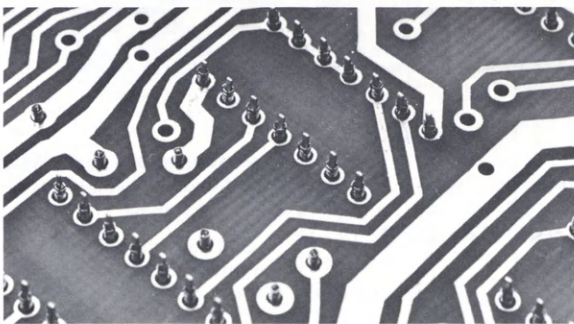
RECOMMENDED CHASSIS CUTOUT

HOLTITE® Series

Zero-Profile Solderless Sockets



Top View



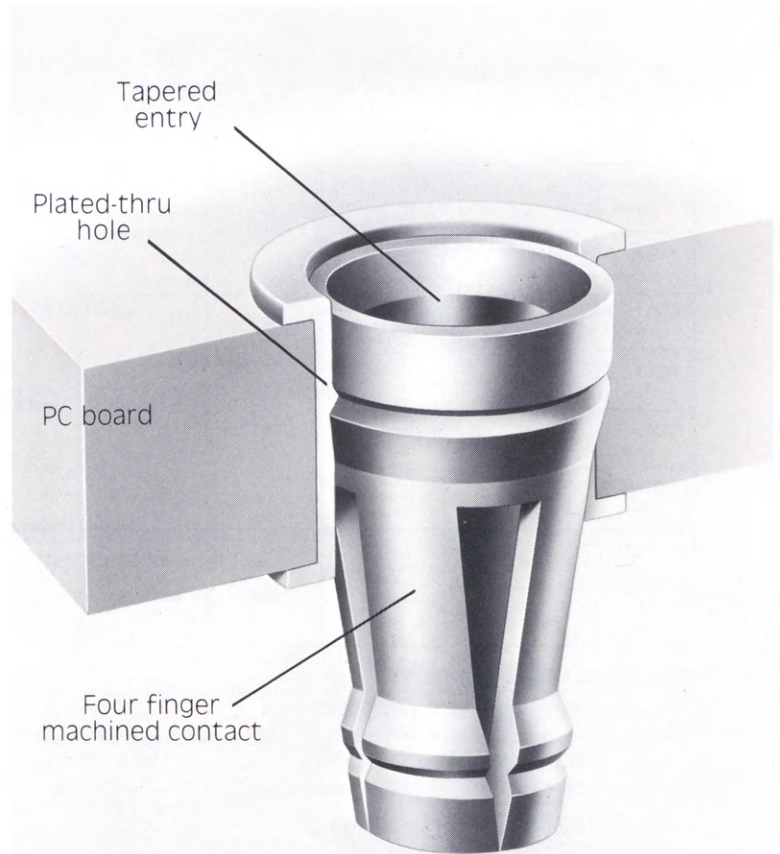
Bottom View

Qualified to MIL-873505/6A

The solderless zero-profile HOLTITE® contact is designed to be press-fit into the plated-thru hole of a printed wiring board. This unique design allows the plated-thru hole to become the component socket. The outer conical shape of the HOLTITE® contact sizes the plated-thru hole when pressed into place. The precision-machined geometry allows for the controlled displacement of plated material without damaging the hole, or affecting the normal mechanical and electrical contact performance.

Design Features and Related Benefits

- **Lowest socket profile**
The profile of the printed wiring board with the HOLTITE® contact installed is less than the length of the IC or component lead, offering the lowest socketing profile, permitting card rack spacing as low as 400", identical to that of direct soldering.
- **Recessed contact offers larger hole diameter for component insertion**
The recessed HOLTITE® contact offers a larger finished hole diameter (.044") than normally used in a typical printed wiring board designed for soldering. The component lead during insertion enters the larger hole and then is guided into place by the tapered-entry contact, which reduces the potential for lead or plating damage. These features make the HOLTITE® contact fully compatible with automatic component insertion equipment.
- **Precision-machined, tapered-entry, four finger contact**
The underlying contact design used in the HOLTITE® system has a proven record of reliability after more than ten years' usage in both commercial and military applications.
- **Retains minimum component lead lengths**
The socketing technique provides the shortest distance between the component seating plane and the contact engagement zone for maximum retention of short component leads.



- **Maximum heat dissipation**
Open contact design permits air flow through the board, increasing heat dissipation and extending component life.
- **Solderless, gas-tight, press-fit insertion**
The solderless, pluggable system saves the user the time and cost of soldering, plus eliminating the potential for heat damage, warpage and corrosive residue contamination.
- **Installation rate — 30,000 contacts minimum (loaded and pressed) per hour**
Contacts can be mass loaded into boards using the Augat 736-M0013 Loading Machine at a typical rate of 1,000 contacts per minute. Pressing is accomplished in less than one minute per board using a standard hydraulic press. Contacts are individually replaceable if required.
- **Removes artwork design restrictions**
Use of the HOLTITE® solderless system removes certain artwork restrictions necessary for wave soldering and solder joint construction. Line spacings can be made as tight as electrical parameters allow without solder bridging or the need for soldermask. Terminal areas can be reduced in diameter without the need of a base for solder fillets. Ground plane areas can be increased without concern for heat-induced warpage.
- **Immediate conversion to the HOLTITE® system**
Existing printed wiring designs can be converted by simply changing the drilled hole diameter prior to plating.

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet.



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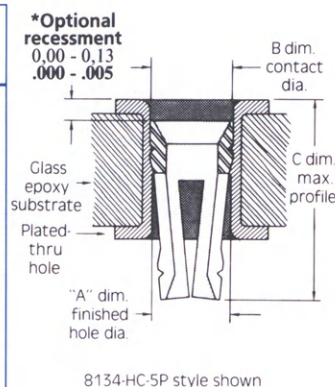
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HOLTITE® Series

Zero-Profile Solderless Sockets

PART NUMBER DESIGNATIONS

HOLTITE Part No.	Contact Material & Finish	Recommended Lead Size	Recommended Primary Drill Size	A Dim. Finished Plated-Thru Hole Size	B Dim. Contact Dia.	C Dim. Maximum Profile	Board Thickness	Plated-Thru Hole Finish							
8134-HC-5P2 (gold)	Beryllium copper gold-plated	Rectangular Lead 0.28 X 0.46 (±0.05) .011 X .018 (±.002) or Round Lead 0.406±0.533 .016-.021 Diameter	1.15 .0453	1.05 ±0.05 .0415 ±.002	1.12 ±0.01 .044 ±.0005	2.72 .107	0.75 .030 and over	0.0076-0.0127 .0003-.0005 Electro-deposited tin/lead over 0.0203-0.0381 .0008-.0015 Min. Thick electro deposited copper plate							
8134-HC-5P3 (tin)	Beryllium copper tin-plated														
8134-HC-6P2 (gold)	Same as 5P2	Round Lead 0.51±0.76 .020-.030 Diameter	1.61 .0635 #52 drill	1.51 ±0.05 .0595 ±.002	1.59 ±0.01 .0625 ±.0005	3.56 .140 (unrecessed)									
8134-HC-6P3 (tin)	Same as 5P3														
8134-HC-8P2 (gold)	Same as 5P2	Round Lead 0.51±0.76 .020-.030 Diameter also suitable for use with .025 sq. post													
8134-HC-8P3 (tin)	Same as 5P3														
8134-HC-12P2 (gold)	Same as 5P2	Round Lead 0.89±1.14 .035-.045	2.0 .0866	2.09 ±0.05 .0825 ±.002	2.18 ±0.01 .0860 ±.0005	4.06 .160 (unrecessed)	1.27 .050 and over								
8134-HC-12P3 (tin)	Same as 5P3														



Cross-section view shows Augat press-fitted HOLTITE® precision-machined contact

*NOTE: Seating holtite flush to top surface of printed wiring board is recommended.

MATERIAL SPECIFICATIONS

Contact Beryllium Copper per QQ-C-530
Finish Gold-plated .000030" per MIL-G-45204 Over Nickel per QQ-N-290; Tin per MIL-T-10727

PART NUMBER EXAMPLE

8 1 3 4 - H C - X P X

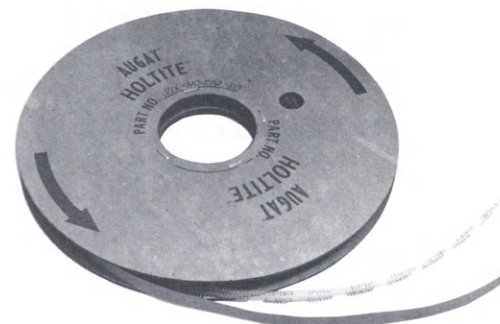
HOLTITE® Series

Contact Type
(see chart above)

HOLTITE® DIP SOCKETS ON REELS

Part No.	Contact Plating	No. of Contacts per Pattern	No. of Patterns per Reel	Row Spacing	Contact Style
322-HCS-5P2-300	Gold	Universal on .100"	—	300"	5P Series
322-HCS-5P3-300	Tin				
322-HCS-5P2-308	Gold	8 Positions on .100"	625		
322-HCS-5P3-308	Tin				
322-HCS-5P2-314	Gold	14 Positions on .100"	357		
322-HCS-5P3-314	Tin				
322-HCS-5P2-316	Gold	16 Positions on .100"	313		
322-HCS-5P3-316	Tin				
322-HCS-5P2-318	Gold	18 Positions on .100"	278		
322-HCS-5P3-318	Tin				
322-HCS-5P2-320	Gold	20 Positions on .100"	250		
322-HCS-5P3-320	Tin				
322-HCS-5P2-400	Gold	Universal on .100"	—	400"	
322-HCS-5P3-400	Tin				
322-HCS-5P2-422	Gold	22 Positions on .100"	227		
322-HCS-5P3-422	Tin				
322-HCS-5P2-424	Gold	24 Positions on .100"	208		
322-HCS-5P3-424	Tin				
322-HCS-5P2-600	Gold	Universal on .100"	—	600"	
322-HCS-5P3-600	Tin				
322-HCS-5P2-624	Gold	24 Positions on .100"	208		
322-HCS-5P3-624	Tin				
322-HCS-5P2-628	Gold	28 Positions on .100"	179		
322-HCS-5P3-628	Tin				
322-HCS-5P2-632	Gold	32 Positions on .100"	156		
322-HCS-5P3-632	Tin				
322-HCS-5P2-636	Gold	36 Positions on .100"	139		
322-HCS-5P3-636	Tin				
322-HCS-5P2-640	Gold	40 Positions on .100"	125		
322-HCS-5P3-640	Tin				
322-HCS-6P2-100	Gold	Single Row 2500 Contacts	N/A	N/A	6P2
322-HCS-6P3-100	Tin				6P3
322-HCS-8P2-100	Gold				8P2
322-HCS-8P3-100	Tin				8P3

N/A = Not Applicable



HOLTITE® Contact Socket Reel

- Available in all standard DIP socket patterns mounted on disposable mylar carrier
- Contacts packaged 5,000 pieces per reel
- Easily installed with hand tool in Augat prototyping kit (399 HK Series) or with bench-top presses
- Contact available in Universal .100" apart X .300", .400" and .600" wide rows for custom applications (can be cut to desired pattern size)



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HOLTITE® Series

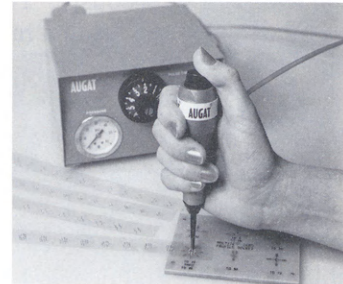
Installation Tools

VARIOUS OPTIONS FOR INSTALLING HOLTITE® CONTACTS



736-M0020

Just starting out - Use the HOLTITE® Printed Wiring Contact Kit. The kit comes complete with contacts and tools to load a few prototype boards for evaluation. Extra cards of contacts are available, or use the HOLTITE® Pneumatic Hand Tool 736-M0020 System for low volume production and selective contact insertion.



736-M0020

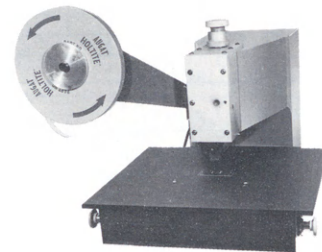
398-HK-001—Gold
398-HK-002—Tin

736-M0015M

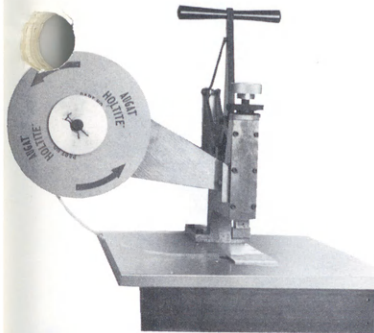
For low to medium volume users of HOLTITE® contacts - Augat offers the HOLTITE® Socket Insertion Machine (736-M0015M) for manual insertion.

736-M0021

The HOLTITE® Pneumatic Insertion Machine (736-M0021) is used for pneumatic insertion. Both the 736-M0015M and the 736-M0021 work in conjunction with the HOLTITE® contacts packaged on a reels. The contacts are available in all the standard DIP configurations from 6 pins on .300" row spacing to 64 pins on .900" spacing. Quick-change seating tools are available to match the spacing of the various patterns sizes. Custom socket patterns are available to match the spacing of the various pattern sizes. Custom socket patterns are available upon request. These machines are designed to work with printed wiring boards which already contain soldered components. The machines are rated to install 5,000 contacts per hour.



736-M0021



736-M0015M

736-M0013

For high-volume users - Augat offers the HOLTITE® Mass Loading Machine (736-M0013). This machine's load rate is 30,000 contacts per hour. Final seating of the contacts is accomplished with an in-house power press.



736-M0013

LOADING SERVICE

Augat also provides a HOLTITE® loading service for those customers not wishing to do their own loading. Regionally located printed circuit board manufacturers are available as HOLTITE® Certified Loading Facilities. Consult Augat for further loading information.

AUGAT® Quality
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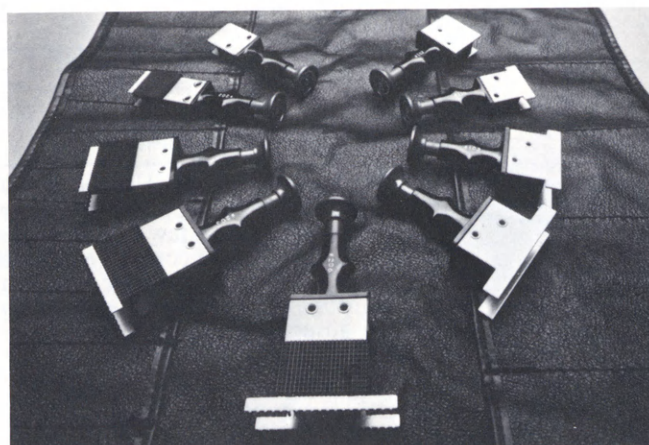
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Tools/Accessories

TI/TW
Series

The insertion and extraction of dual inline integrated circuit packages has always presented a problem of aligning all leads simultaneously. The TI/TW family of tools solves these problems with a range of tools for 6-thru 40-pin devices.

- Smooth insertion and withdrawals of IC's
- Prevents bending IC leads while inserting and removing
- Takes up limited amount of board space for support
- Available in flexible roll pouch, for convenient organization of service tool kit



TK8136-1 MAC-PAK TOOL KIT

INSERTION TOOLS

Part Number	Accepts Components
TI8136-8	8 leads on 7,62/.300 centers
TI8136-14/16	14 and 16 leads on 7,62/.300 centers
TI8136-18/20	18 and 20 leads on 7,62/.300 centers
TI8136-22	22 leads on 10,16/.400 centers
TI8136-24/28	24 and 28 leads on 15,24/.600 centers
TI8136-32/40	32 thru 40 leads on 15,24/.600 centers



INSERTION
TOOL

WITHDRAWAL TOOLS

Part Number	Accepts Components
TW8136-8	8 leads on 7,62/.300 centers
TW8136-14/20	14 thru 20 leads on 7,62/.300 centers
TW8136-22	22 leads on 10,16/.400 centers
TW8136-24/28	24 and 28 leads on 15,24/.600 centers
TW8136-32/40	32 thru 40 leads on 15,24/.600 centers
TW8136-1	8 thru 40 pos insertion and extraction tools in a 26-pocket, reinforced, double-thick vinyl roll pouch



WITHDRAWAL
TOOL

DIP EXTRACTOR TOOL

Part Number	Description
T114-1	Simple tool that assists removal of DIP from top side of panel

DIP
EXTRACTOR
TOOL

Augat reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet. Current drawings and specs available upon request.



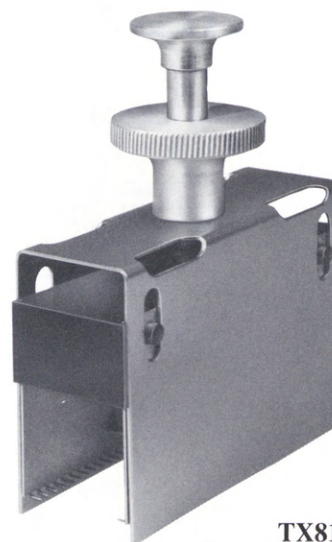
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IC Extractor Tools

TX
Series

The TX8136 Family of precision lead-screw extractor tools assures a controlled, aligned and absolute parallel withdrawal of IC's. It can save you many times the cost of the tool in protecting expensive IC devices from pin damage.

- The extractor tool uses the shoulders of the IC socket or surface of the printed wiring board as a stable lifting platform, assuring no slippage or misalignment during removal of the IC's, as often happens while using traditional IC removal tools
- Can be grounded to protect delicate MOS devices from static discharge
- Lead screw adjustment applies a constant parallel axial force, eliminating problems with bent or broken IC pins
- These extractor tools remove soldered or socketed IC's from printed wiring boards. Soldered IC's are removed by applying heat to the soldered junction, while gently turning lead screw to exert a continuous force



TX8136-64

Part No.	Description
TX8136-14/20	14 to 20 pins, .300" rows
TX8136-22	22 pins, .400" rows
TX8136-24	24 pins, .600" rows
TX8136-40	40 pins, .600" rows
TX8136-64	64 pins, .900" rows

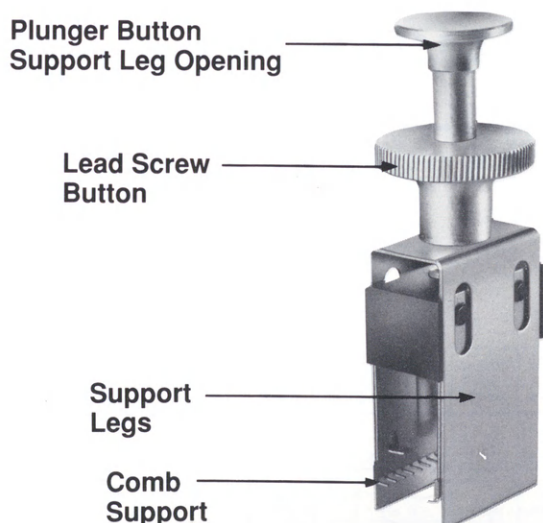


Fig. 1 Plunger button opens and closes support legs encasing the IC. Turning lead screw raises the IC from its socketed or soldered position

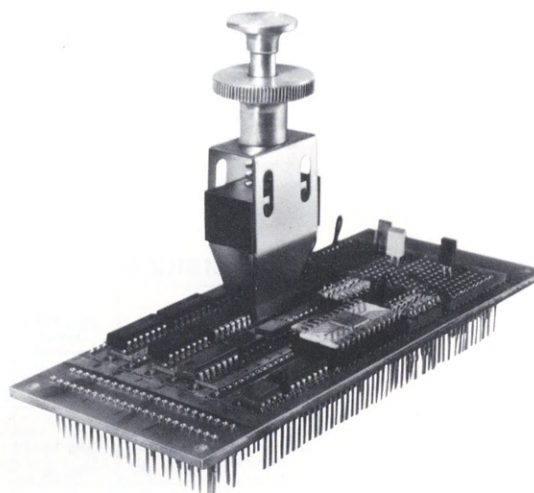


Fig. 2 Typical withdrawal of IC from circuit

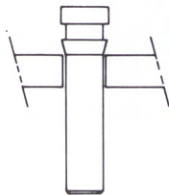
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Socket Terminals

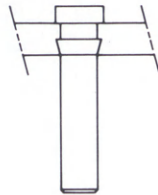
LSG Series

PRECISION MACHINED ASSEMBLIES

INSTALLATION



Step 1
Drop socket terminal into
recommended mounting hole



Step 2
Press socket terminal with a
flat tool until seated

Tapered Entry Design insures fast
and easy component lead
insertion/withdrawal

Inner Contact Design with four-
leaf machined closed-entry
beryllium copper, retains lead or pin
over entire diameter range (high to low
extremes) without intermittency



"Barb" Design assures positive
retention in printed circuit board,
allows simple arbor tool insertion

Outer Sleeve Design available
in various styles, terminations and
plating

MATERIAL SPECIFICATIONS

Two-Piece, Machined Socket Terminal

Inner Contact Beryllium Copper, Gold-Over Nickel-plated
Outer Sleeve Brass, Gold-Over Nickel-plated or Tin-Over
Copper-plated

Consult factory for availability of variations not shown.

PART NUMBER DESIGNATIONS

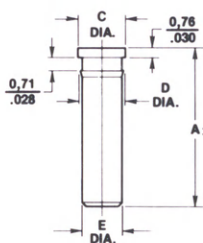
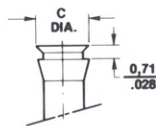


FIG. 1

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
SLSG-1DG8-1	0.41-0.53 .016-.021	2.54-4.83	7.21 .284	—	1.83 .072	1.57 .062	1.35 .053	—	—	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
SLSG-1DG9-1		.100-.190	6.53 .257	—	—	1.75 .069	1.52 .060	—	—	—			1/16 Drill 1.57/.062 Dia. Ref.
LSG-1DG4-1		3.18-4.45 .125-.175	5.16 .203	—	1.57 .062	1.52 .060	1.32 .052	—	—	—			#54 Drill 1.40/.055 Dia. Ref.
LSG-3DG2-1		4.75-7.14 .187-.281	8.43 .332	—	2.54 .100	2.36 .093	2.13 .084	—	—	—			#44 Drill 2.18/.086 Dia. Ref.

PART NUMBER DESIGNATIONS



Other dimensions per Fig. 1

FIG. 1A

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1DG2-1	0.41-0.53 .016-.021	3.18-4.45 .125-.175	5.16 .203	—	1.57 .062	1.52 .060	1.32 .052	—	—	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LSG-2DG1-1	0.51-0.76 .020-.030	3.96-7.14 .156-.281	7.92 .312	—	2.36 .093	2.26 .089	1.93 .076	—	—	—			#45 Drill 2.08/.082 Dia. Ref.
LSG-2DG3-1	—	—	6.22 .245	—	—	—	—	—	—	—			#45 Drill 2.08/.082 Dia. Ref.
LSG-3DG1-1	0.76-1.02 .030-.040	4.75-7.14 .187-.281	7.92 .312	—	2.54 .100	2.44 .096	2.13 .084	—	—	—			#43 Drill 2.26/.089 Dia. Ref.
LSG-4DG1-1	1.02-1.27 .040-.050	—	—	—	2.92 .115	2.79 .110	2.49 .098	—	—	—			#37 Drill 2.64/.104 Dia. Ref.



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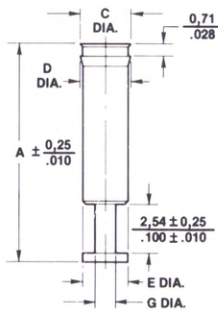


FIG. 2

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1CG1-1	0.41-0.53 .016-.021	3.18-4.45 .125-.175	8.20 .323	—	1.57 .062	1.52 .060	1.32 .05	—	0.64 .025	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LSG-3CG1-1	0.76-1.02 .030-.040	4.75-7.14 .187-.281	10.97 .432	—	2.54 .100	2.44 .096	2.13 .084	—	1.14 .045	—			#43 Drill 2.26/.089 Dia. Ref.
LSG-4CG1-1	1.02-1.27 .040-.050	4.32-7.14 .170-.281	10.97 .432	—	2.92 .115	2.79 .110	2.49 .078	—	—	—			#37 Drill 2.64/.104 Dia. Ref.

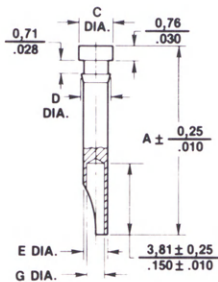


FIG. 3

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1BG2-1	0.41-0.53 .016-.021	3.56-4.45 .140-.175	10.03 .395	—	1.83 .072	1.52 .060	1.35 .053	—	0.97 .038	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LSG-2BG2-1	0.51-0.76 .020-.030	3.96-7.14 .156-.281	12.80 .504	—	2.16 .085	2.08 .082	1.85 .073	—	1.40 .055	—			#48 Drill 1.98/.076 Dia. Ref.

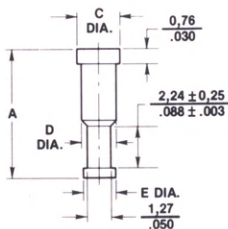


FIG. 4

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-2CG1-1	0.51-0.76 .020-.030	3.96-6.35 .156-.250	6.86 .270	—	2.16 .085	1.88 .074	1.78 .070	—	—	—	Gold	Gold	

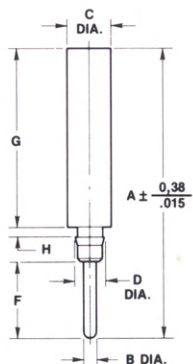


FIG. 5

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-2AG2-1	0.51-0.76 .020-.030	3.56-4.32 .140-.170	10.42 .419	0.69 .027	2.36 .093	1.52 .060	—	4.06 .160	4.75 .187	0.56 .022	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LSG-2AG3-1			15.42 .607		2.39 .094				9.35 .375				

Socket Terminals

LSG Series

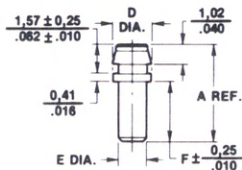


FIG. 6

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1DG1-1	0.41-0.53 .016-.021	3.18-3.94 .125-.155	5.16 .203	—	—	1.96 .078	1.52 .060	3.18 .125	—	—	Gold	Gold	#50 Drill 1.78/.070 Dia. Ref.

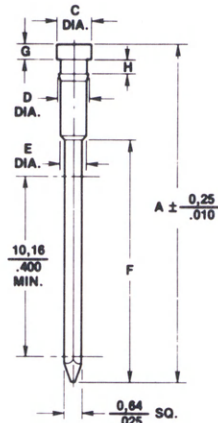


FIG. 7

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1FG1-1	0.41-0.53 .016-.021	2.54-4.45 .100-.175	17.86 .703	—	0.83 .072	1.52 .060	1.32 .052	12.95 .510	0.76 .030	0.71 .028	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LSG-1FG1-14			—	—				—				Tin	
LSG-1FG6-1			14.30 .563	—				9.40 .370				Gold	
LSG-1FG6-14			—	—				—				Tin	
LSG-1FG10-1			11.51 .453	—				6.60 .260				Gold	
LSG-1FG10-14			—	—				—				Tin	
LSG-2FG2-1	0.51-0.76 .020-.030	3.96-5.54 .156-.218	20.37 .802	—	2.16 .085	2.08 .082	1.85 .073	12.95 .510	3.53 .139	1.57 .062	Gold	Gold	#48 Drill 1.93/.076 Dia. Ref.
LSG-2FG2-14			—	—				—	—	—		Tin	
LSG-2FG1-1			20.62 .812	—				—	—	—		Gold	
*LSG-1FG47-1	0.41-0.53 .016-.021	—	14.30 .563	—	0.83 .072	1.52 .060	1.32 .052	9.40 .370	0.76 .030	0.71 .028	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
*LSG-1FG47-14			—	—				—				Tin	
*LSG-1FG48-1			17.86 .703	—				12.95 .510				Gold	
*LSG-1FG48-14			—	—				—				Tin	
*LSG-1FG48-14			—	—				—				—	

* Low Insertion Force Contacts

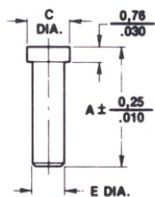


FIG. 8

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-2DG7-7	0.51-0.78 .020-.030	3.56-4.70 .140-.185	6.35 .250	—	2.36 .093	—	1.73 .068	—	—	—	Gold	Tin	#45 Drill 2.08/.082 Dia. Ref.

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1DG6-16	0.41-0.53 .016-.020	3.18-4.45 .125-.175	5.16 .203	—	1.57 .062	1.52 .060	1.32 .052	—	—	—	Gold	SST	#54 Drill 1.40/.055 Dia. Ref.
LSG-1DG6-20	—	—	—	—	—	—	—	—	—	—		Gold	

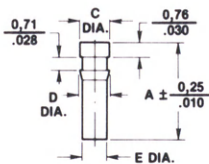


FIG. 8A

Socket Terminals

LSG Series

PRECISION MACHINED ASSEMBLIES

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. $\pm .002$ mm/in.	C dim. $\pm .003$ mm/in.	D dim. $\pm .003$ mm/in.	E dim. $\pm .003$ mm/in.	F dim. $\pm .010$ mm/in.	G dim. $\pm .010$ mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-2AG5-1	0.51-0.76 .020-.030	3.58-4.19 .141-.165	18.59 .732	—	2.36 .093	1.52 .060	1.35 .053	4.06* .160	—	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.

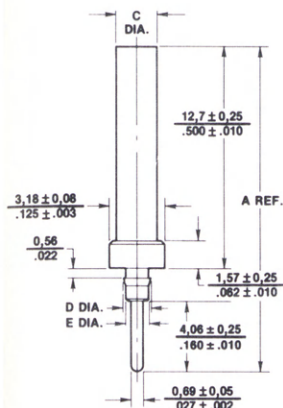


FIG. 9

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. $\pm .002$ mm/in.	C dim. $\pm .003$ mm/in.	D dim. $\pm .003$ mm/in.	E dim. $\pm .003$ mm/in.	F dim. $\pm .010$ mm/in.	G dim. $\pm .010$ mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1AG2-1	0.41-0.53 .016-.021	3.18-3.63 .125-.143	7.37 .290	0.51 .020	1.83 .072	1.57 .062	1.35 .053	3.18 .125	—	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LSG-1AG2-14		3.05-3.63 .120-.143	11.35 .447	0.46 .018			1.30 .051	7.16 .282	—	—		Tin	
LSG-1AG5-1								7.16 .282	—	—		Gold	
LSG-1AG5-14								7.16 .282	—	—		Tin	
LSG-1AG6-1								4.45 .175	—	—		Gold	
LSG-1AG6-14								4.45 .175	—	—		Tin	
SLSG-1AG2-1								3.18 .125	—	—		Gold	
SLSG-1AG2-14								3.18 .125	—	—		Tin	
LSG-1AG23-1								4.57 .180	—	—		Gold	
LSG-1AG23-14								4.57 .180	—	—		Tin	
LSG-2AG10-1	0.51-0.76 .020-.030	3.56-3.68 .140-.145	7.62 .300	0.51 .020	2.16 .085	2.08 .082	1.85 .073	—	—	—	Gold	#48 Drill 1.93/.076 Dia. Ref.	
*LSG-1AG53-1	0.41-0.53 .016-.021	2.54-3.63 .100-.143	7.37 .290		2.16 .085	2.08 .082	1.85 .073	3.18 .125	—	—	Gold	#54 Drill 1.40/.055 Dia. Ref.	
*LSG-1AG53-14	3.18 .125	—	—					Tin					

* Low Insertion Force Contacts

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. $\pm .002$ mm/in.	C dim. $\pm .003$ mm/in.	D dim. $\pm .003$ mm/in.	E dim. $\pm .003$ mm/in.	F dim. $\pm .010$ mm/in.	G dim. $\pm .010$ mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LST-1CG1-1	0.41-0.53 .016-.021	3.05-5.33 .120-.210	9.14 .360	—	1.40 .055	1.52 .060	1.30 .051	—	0.89 .035	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.

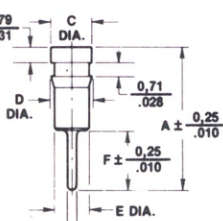


FIG. 10

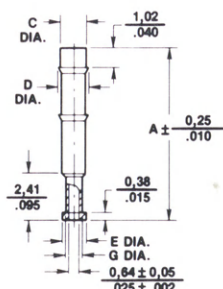


FIG. 11

Socket Terminals

LSG Series

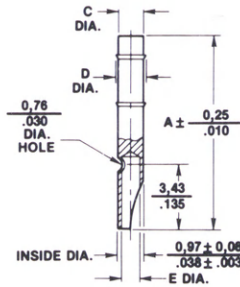


FIG. 12

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LST-1BG1-1	0.41-0.53	3.05-5.33	10.31	—	1.40	1.52	1.30	—	—	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LST-1BG4-1	.016-.021	.120-.210	.406	—	.055	.060	.051	—	—	—	—	—	—

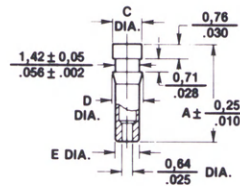


FIG. 13

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1DG10-1	0.41-0.53	3.05-5.33	5.16	—	1.58	1.52	1.32	—	—	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
	.016-.021	.120-.210	.203	—	.062	.060	.052	—	—	—	—	—	—

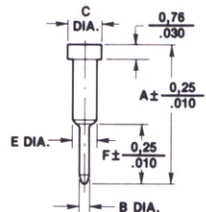


FIG. 14

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1AG14-1	0.41-0.53	2.54-3.63	7.37	0.51	1.83	1.57	1.35	3.18	—	—	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LSG-1AG14-14	.016-.021	.100-.143	.290	.020	.072	.062	.053	.125	—	—	—	Tin	—

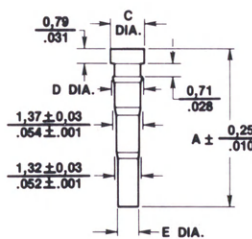


FIG. 15

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LSG-1BG3-14	0.41-0.53	3.05-4.70	8.41	—	1.83	1.55	1.19	—	—	—	Gold	Tin	#54 Drill 1.40/.055 Dia. Ref.
	.016-.021	.120-.185	.406	—	.072	.061	.047	—	—	—	—	—	—

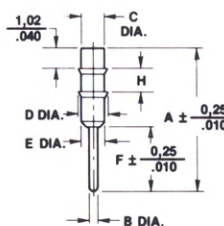


FIG. 16

PART NUMBER DESIGNATIONS

Part No.	Pin Dia. Range	Pin Length Range	A dim. mm/in.	B dim. ±.002 mm/in.	C dim. ±.003 mm/in.	D dim. ±.003 mm/in.	E dim. ±.003 mm/in.	F dim. ±.010 mm/in.	G dim. ±.010 mm/in.	H dim. mm/in.	Contact Finish	Sleeve Finish	Recommended Mounting Hole
LST-1AG9-19	0.41-0.53	3.18-5.54	11.94	0.51	1.40	1.52	1.30	5.59	—	2.54	Gold	Gold	#54 Drill 1.40/.055 Dia. Ref.
LST-1AG14-1	.016-.021	.125-.218	.470	.020	.053	.060	.051	.220	—	.100	—	—	—
		3.56-5.54	31.50	0.46				2.54					
		.140-.218	1.240	.018				1.000					

Pin Terminals

PRECISION MACHINED & STAMPED TERMINALS

- Available in printed circuit and wire-wrapping termination, gold- or tin-plated.
- Terminals with "barb" design are for use in 1/16 inch thick minimum boards
- Custom terminals are made upon request

MATERIAL SPECIFICATIONS

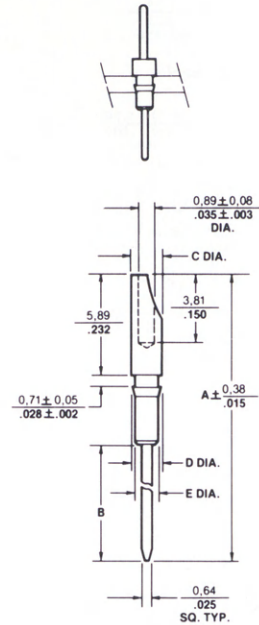
TerminalsBrass, gold-over nickel-plated
or tin-over copper plated

Phosphor bronze, gold-over nickel-
plated or tin-over copper-plated

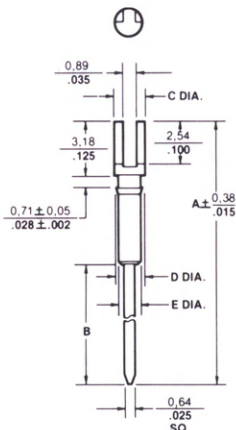
PART NUMBER DESIGNATIONS

See Individual Drawings

Part Numbers 314-, 8150-, 8200- are stamped
Part Numbers 8128- are machined



8128-20P Series



8128-23P Series

PART NUMBER DESIGNATIONS

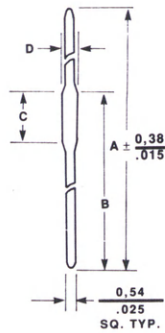
Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-20P3	22,99	12,95	1,83	1,57	1,35	Brass	Gold	#54 Drill 1,40/.055 Dia. Ref. 1,57/.062 Min. Board Thickness
8128-20P4	.905	.510	.072	.062	.053		Tin	

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-23P2	20,27	12,70	1,83 .072	1,57 .062	1,35 .053	Brass	Gold	#54 Drill 0,89/.053 Dia. Ref. 1,57/.062 Min. Board Thickness
8128-23P3	.798	.500					Tin	
8128-23P5	16,71	9,40					Gold	
8128-23P6	.658	.370					Tin	

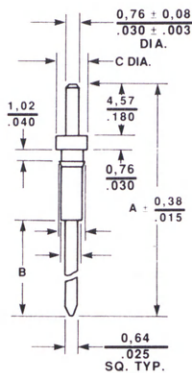
Pin Terminals

PART NUMBER DESIGNATIONS

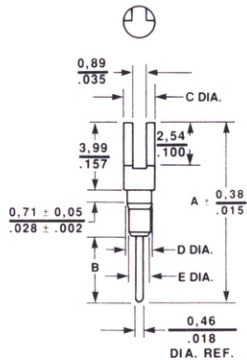
Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8150-6P2	25,65 1.010	17,53 .690	4,06 .160	0,84 .033	—	Phosphor Bronze	Gold	#65 Drill 0,89/.035 Dia. Ref. 1,57/.062 Min. Board Thickness
8150-6P4							Tin	
8150-6P10	23,44 .923	17,07 .672					Gold	
8150-6P13							Tin	
8150-6P16	19,83 .783	13,51 .532					Gold	
8150-6P17							Tin	
8150-6P22	21,67 .853						Gold	



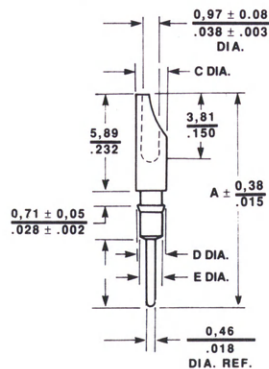
8150-6P Series



8128-19P Series



8128-39P6 Series



8128-40P10 Series

PART NUMBER DESIGNATIONS

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-19P3	23,43 .883	12,95 .510	1,83 .072	1,57 .062	1,35 .053	Brass	Gold	#54 Drill 1,40/.055 Dia. Ref. 1,57/.062 Min. Board Thickness
8128-19P4							Tin	

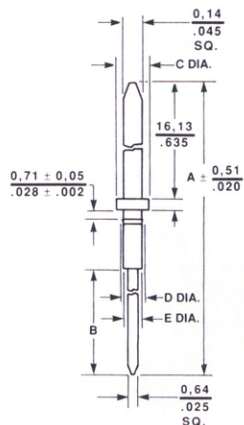
PART NUMBER DESIGNATIONS

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-39P6	10,57 .416	3,96 .156	1,83 .072	1,57 .062	1,35 .053	Phosphor Bronze	Gold	#54 Drill 1,40/.055 Dia. Ref. 2,36/.093 Min. Board Thickness

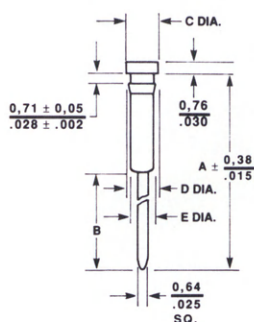
PART NUMBER DESIGNATIONS

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-40P10	12,47 .491	3,96 .156	1,83 .072	1,52 .060	1,35 .053	Phosphor Bronze	Gold	#54 Drill 1,40/.055 Dia. Ref. 2,36/.093 Min. Board Thickness

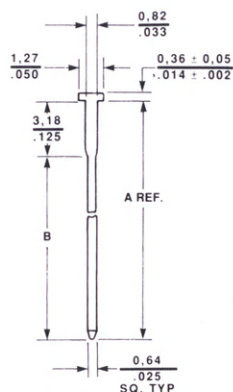
Pin Terminals



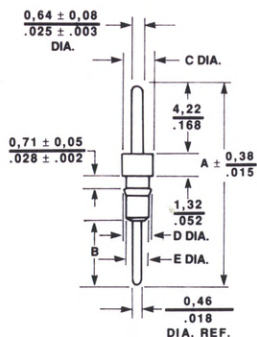
8128-9P Series



8128-17P Series



314-17P Series



8128-41P6 Series

PART NUMBER DESIGNATIONS

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-19P3	33,99	12,95	2,36	1,57	1,35	Brass	Gold	#54 Drill 1,40/.055 Dia. Ref. 1,57/.062 Min. Board Thickness
8128-19P4	1.338	.510	.093	.062	.053		Tin	

PART NUMBER DESIGNATIONS

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-17P2	17,07						Gold	#54 Drill 1,40/.055 Dia. Ref. 1,57/.062 Min. Board Thickness
8128-17P4	.672						Tin	
8128-17P5	13,51	9,40	1,57	1,57	1,35	Brass	Gold	
8128-17P6	.532	.370	.062	.062	.053		Tin	
8128-17P10	10,74	6,60					Gold	
8128-17P11	.423	.260					Tin	

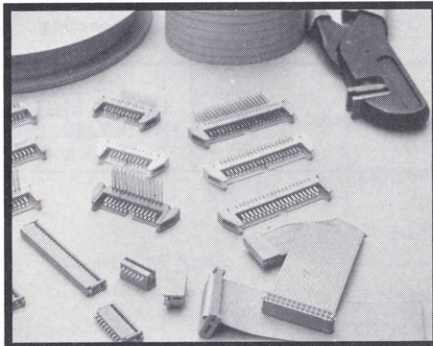
PART NUMBER DESIGNATIONS

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
814-17P2	17,02	13,84	—	—	—	Phosphor Bronze	Gold	#65 Drill 0,89/.035 Dia. Ref. 1,57/.062 Min. Board Thickness
814-17P3	.670	.545					Tin	
814-17P5	13,34	10,16					Gold	
814-17P14	.525	.400					Tin	

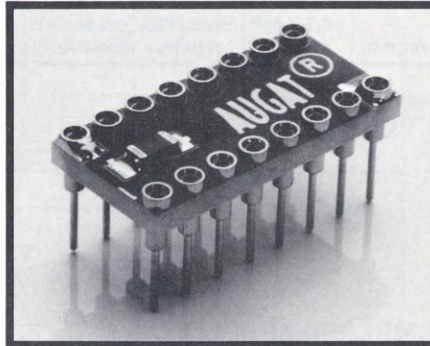
PART NUMBER DESIGNATIONS

Part No.	A mm/in.	B ±0,25/.010 mm/in.	C ±0,08/.003 mm/in.	D ±0,08/.003 mm/in.	E ±0,08/.003 mm/in.	Materials	Finish	Recommended Mounting Hole
8128-41P6	12,12 . <u>477</u>	3,96 . <u>156</u>	1,83 . <u>072</u>	1,52 . <u>060</u>	1,35 . <u>053</u>	Phosphor Bronze	Gold	#54 Drill 0,89/.055 Dia. Ref. 1,57/.062 Min. Board Thickness

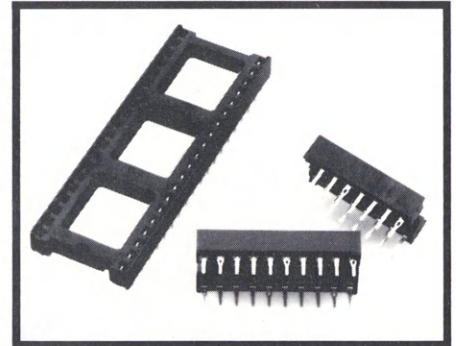
Additional Products Available From Components Division



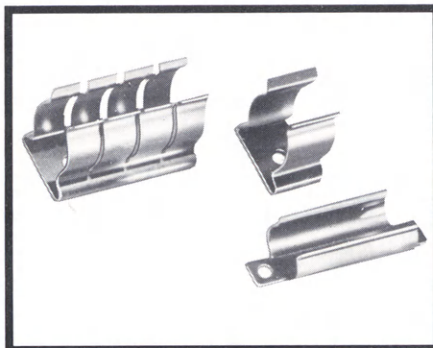
Flat Cable Accessories



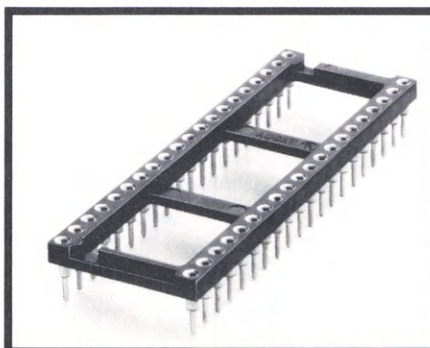
DS Series Decoupling Sockets*



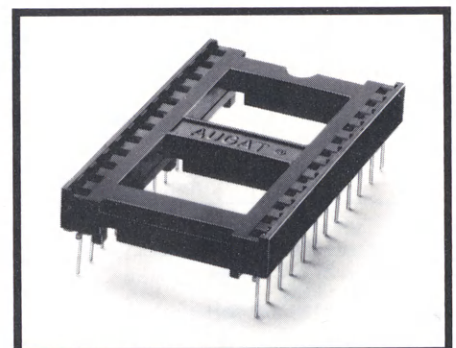
Press Fit IC Socket



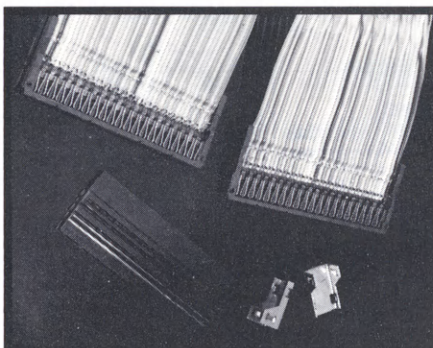
Component Clips (6000 Series)



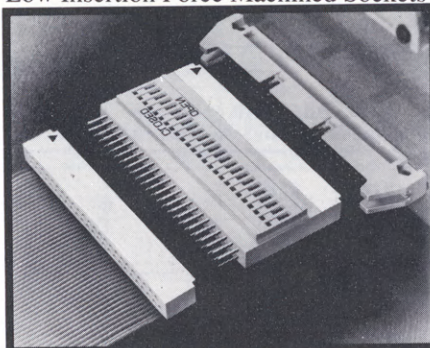
High Volume Machined Sockets
Low Insertion Force Machined Sockets



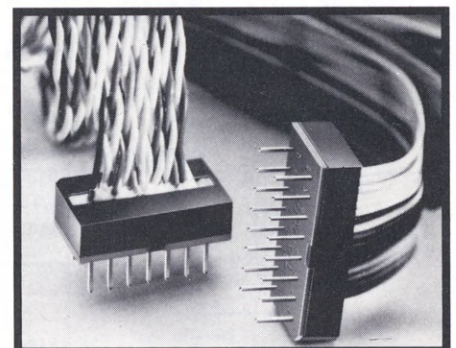
Low Cost Beam Socket



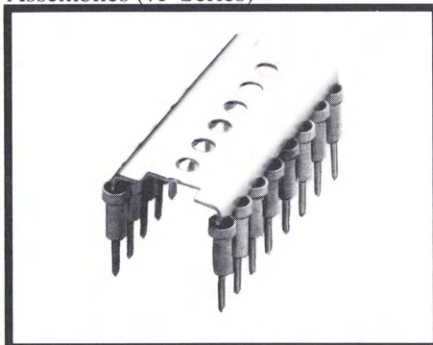
Solder Termination DIP Plug
Assemblies (7P Series)



Intraswitch Connector System



Selective Grounding High Density
Flat Cable System

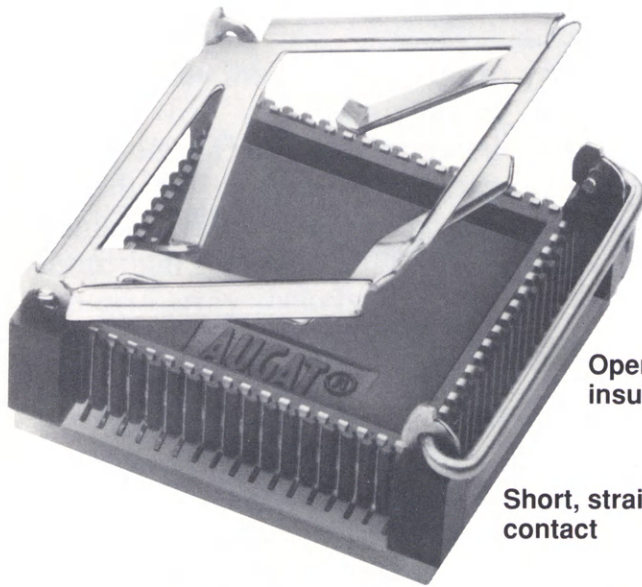


Augat Components Division manufactures one of the most extensive product lines in the interconnection industry. The above photographs are a small sample of the many types of products that are in stock at your local distributor's or at the factory. Please consult your local sales representative for availability and latest product bulletins.

* Other Decoupling Sockets available. Consult factory.

Leadless Clip Carrier Socket

CCS Series

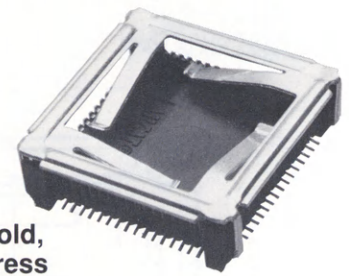


Open-sided insulator

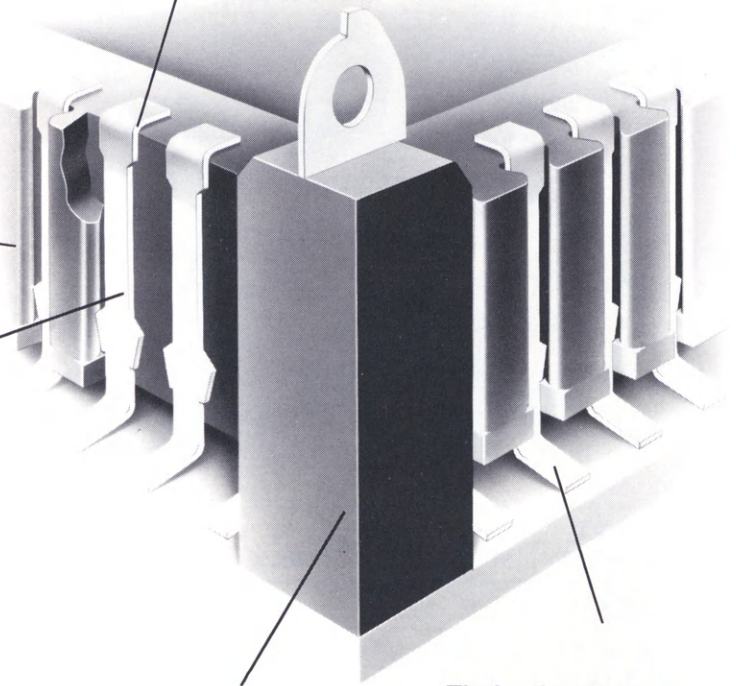
Short, straight contact

The Augat CCS Series features a contact with optimum configuration for minimizing impedance in high speed VLSI applications. Combined with a temperature-resistant, open-sided insulator, the contact also maximizes heat dissipation as well as providing visual inspection of reflow solder joints. Add these benefits to many more and the CCS Series becomes the most operationally practical answer to socketing JEDEC A and B leadless chip carriers.

- Open-hinged cover with latching bar provides convenient, secure locking of chip carrier to socket, allowing heat sink to be mounted on top of carrier
- Open-sided insulator improves heat dissipation, provides test points and accommodates plating bridge flash on carrier. Insulator material offers 50°F higher service temperature than standard PBT
- Carrier location posts and polarizing feature ensure correct orientation of chip carrier and proper alignment of carrier pads to socket contacts. Maximum .0025" contact float further prevents mismatching of carrier pads and cross shorting



Selective gold, anti-overstress contact wing



Chip carrier location post

Tin/lead outboard solder tail

- Anti-overstress and column loaded beam design of contact ensure high normal force (130 grams) while protecting both carrier pads and socket contacts
- Outboard contact solder tail facilitates visual inspection of reflow solder joints, easy cleaning and repair. Short, straight contact minimizes impedance in high speed VLSI applications.
- Center locknut optional for positive protection against severe vibration
- JEDEC Type A and B compatible design with .050" centers, surface mount, requires minimum printed circuit or ceramic board real estate

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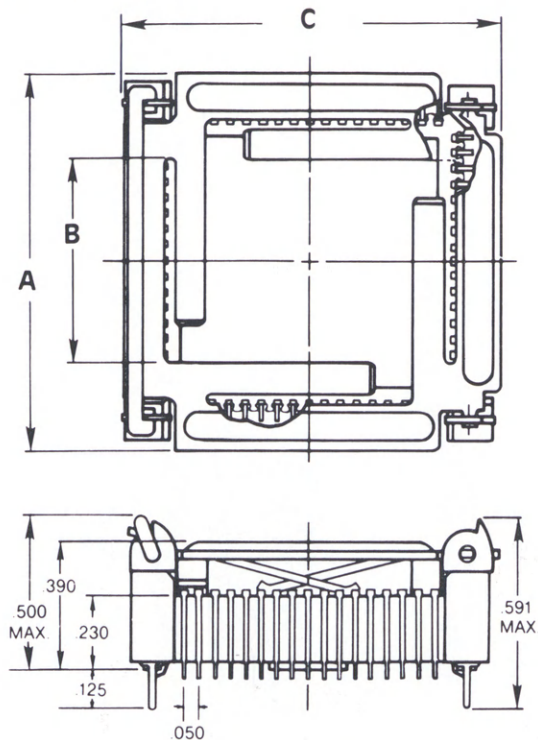
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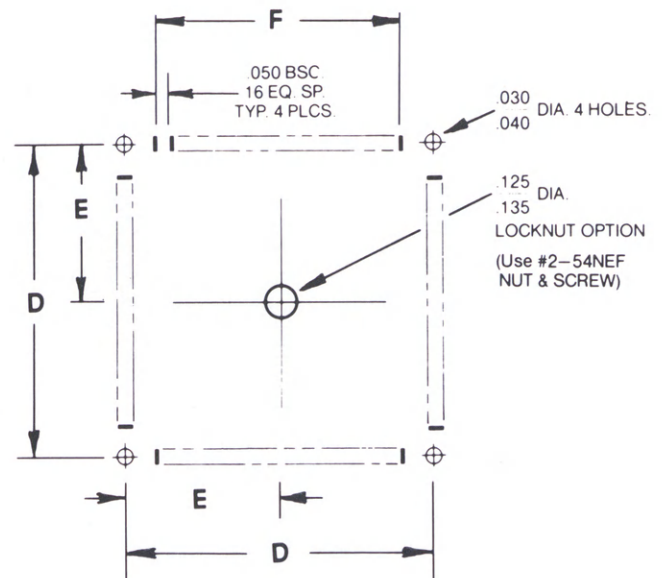
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CCS Series

DIMENSIONS



FOOTPRINT



PART NUMBER	A MAX.	B SQ.	C MAX.	D BSC.	E BSC.	F BSC.
CCS52	1.000	.450	.981	.800	.400	.600
CCS68	1.200	.650	1.181	1.000	.500	.800
CCS84	1.400	.850	1.318	1.200	.600	1.000

CUSTOMER OPTION:

Socket to board polarization accomplished by removal of one or more location posts.

MATERIAL SPECIFICATIONS

Insulator Glass Filled Polyetherimide (PDI), heat deflection temperature 230°C at 264 PSI, UL flammability rating: 94V-0 (black)
 Contacts Beryllium Copper (PER QQ-C-533)
 Plating 30µ" Selective Gold Over Nickel on Contact Surface, Tin/Lead on Solder Tail
 Cover Nickel Plated Spring Steel or Stainless Steel

PART NUMBER DESIGNATIONS

Solid Insulator		Lock Nut Option	
JEDEC A	JEDEC B	JEDEC A	JEDEC B
CCS52-1G1	CCS52-1G3	CCS52-1G2	CCS52-1G4
CCS68-1G1	CCS68-1G3	CCS68-1G2	CCS68-1G4
CCS84-1G1	CCS84-1G3	CCS84-1G2	CCS84-1G4

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE 8 Milliohms
 OPERATING TEMPERATURE -65°C to +125°C
 HUMIDITY 10 Milliohms max. change, Method 1002.2 Mil. Std. 1344A
 SHOCK 100 G's sawtooth, Method 2005.1, condition G, Mil. Std. 1344A
 DURABILITY 50 cycles, 10 Milliohms max. change, Method 2016, Mil. Std. 1344A
 THERMAL SHOCK 5 cycles -55° to +85°C, Method 1003.1, condition A, Mil. Std. 1344A
 NORMAL FORCE 130 Gram Per Contact Average
 SOLDERABILITY Passed Mil. Std. 202F Method 208
 COVER CLOSING FORCE 10 Lbs. Average
 SPRING FORCE CLOSED 3.5 Lbs. Per Cover Arm



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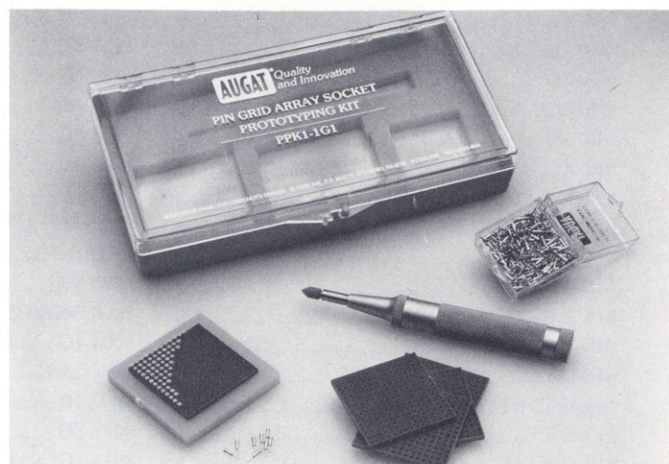
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Pin Grid Array Socket Prototyping Kit

PPK 1-1G1
Series

The Augat Pin Grid Array Socket Prototyping Kit reduces the time required to get a specific socket for any engineering prototyping situation. The kit is supplied with a newly introduced low insertion force machined inner contact, which reduces the insertion force by more than 50% when compared to conventional pin grid array sockets

- Precision machined four finger inner contact provides seamless, concentric funnel entry for easy, safe, low insertion force socketing. .018" dia. pin requires only an average 3.4 oz./line insertion force
- Non-wicking closed bottom, precision machined sleeve protects 100% against flux and solder contamination
- Low profile .062" thick glass epoxy insulator



PPK1-1G1

KIT CONTENTS

- 1 PS-26P1 back-up board
- 5 PS-27P1 15 X 15 universal socket form
- 500 LSG-1AG78-14 socket pins
- 1 399-HT-114 spring loaded seating tool
- 1 399-HT-112 seating tip

MATERIAL SPECIFICATIONS

INSULATOR	Blue Glass Epoxy, .062" Thick, 94V-2
INNER CONTACT	Machined Beryllium Copper
OUTER SLEEVE	Machined Brass
PLATING, INNER CONTACT	30 Micro-inch Gold Over Nickel
PLATING, OUTER SLEEVE	Tin Over Copper

PERFORMANCE CHARACTERISTICS

BULK CONTACT RESISTANCE	8 Milliohms
CAPACITANCE (CONTACT-TO-CONTACT)	1.0 Pf per Mil. Std. 1344, Method 3003
INSULATION RESISTANCE	100 Megohms at 500 VDC
DIELECTRIC WITHSTANDING VOLTAGE (DWV)	1500 RMS Volts AC
OPERATING TEMPERATURE	-55°C to +125°C



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Notes

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